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VOLUME II

THE COLONIES

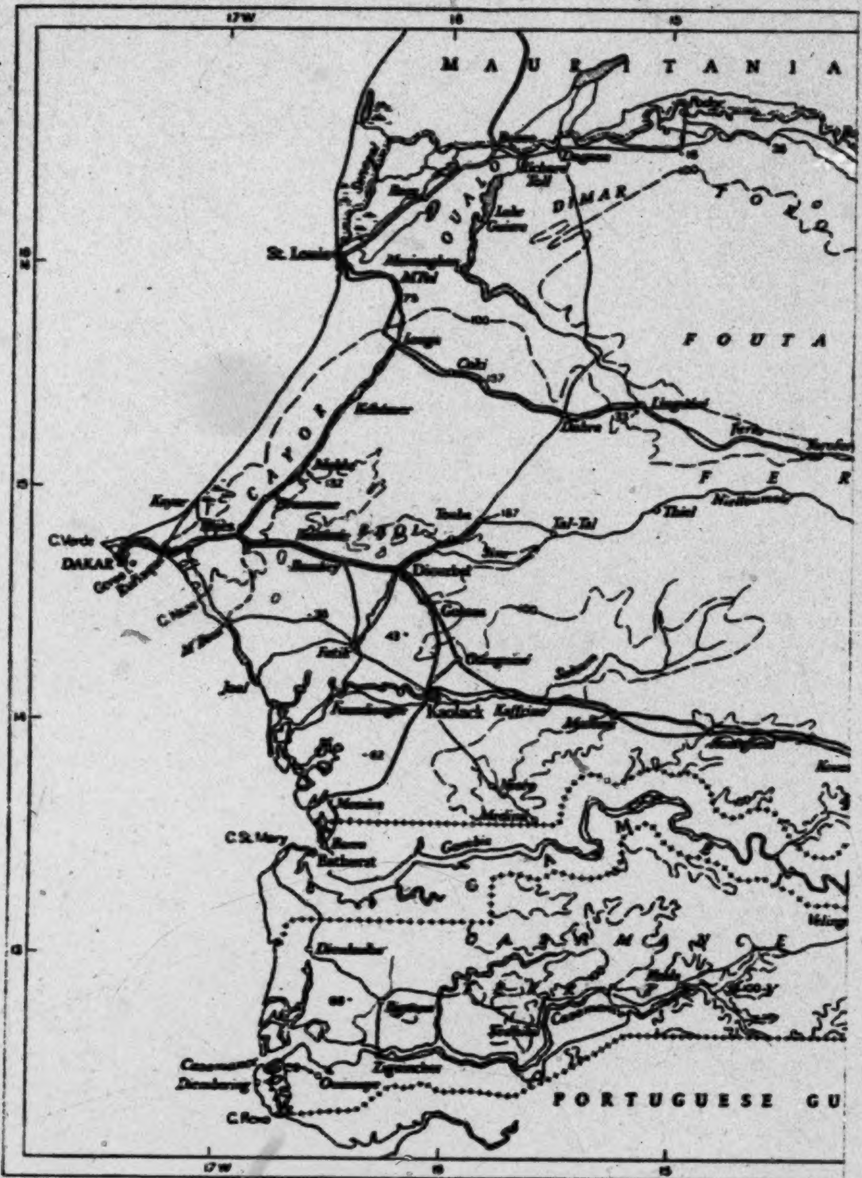
DECEMBER 1944

NAVAL INTELLIGENCE DIVISION

[Title Page]

22:Winterbotham et al. K-4 (no date) 1944 MS37 Senegal MS37
Gambia FC1

S
G
102
103
131
133
361
491
S
496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C. Verde
DAKAR
Goree
Rufisque
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M'Bour
Joal
Fatik
Diourbel
Touba
Kaolack
Kaffrine
F E R
C. St. Mary
Bathurst
Gambia
G A M
C A S A M A N C E
Ziguinchor
Diembering
C. Roxo
P O R T U G U E S E G U
16
15
14
13

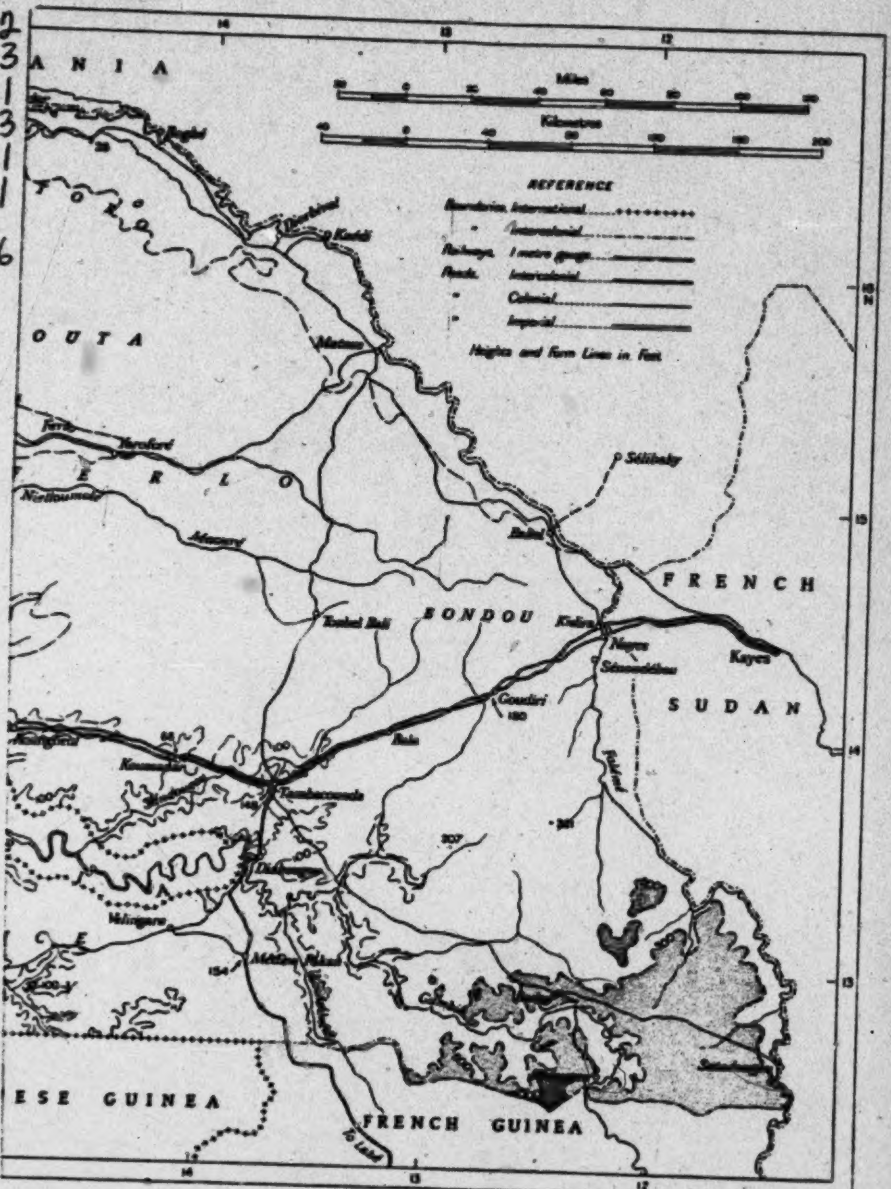
FIG. 47. Seneg

[Facing P. 395 (A)]

[Pp i-xvi and pp. 1-394 not processed]

22:Winterbotham et al.   K-4 (no date)   1944   MS37   Senegal MS 37
Gambia FC1

S
G
102
103
131
133
361
491
S
496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Goudiri
Bala
Tambacounda
Koussanar
Vélingara
Falémé
ESE GUINEA
FRENCH GUINEA
To Labé
Miles
Kilometres
REFERENCE
Boundaries International
Intercolonial
Railways 1 metre gauge
Roads Intercolonial
Colonial
Imperial
Heights and Form Lines in Feet
14
13
12

FIG. 47. *Senegal*

[Facing P. 395(B)]

22:Winterbotham et al. K-4 (no date). 1944 MS37 Senegal MS 37

[p395]

CHAPTER VIII

SENEGAL AND THE DISTRICT OF DAKAR

1. GENERAL

Senegal. Area: 77,220 square miles. Population (1937): 1,666,374. 161
Density per square mile: 21·58. Capital: St. Louis. [131]
District of Dakar. Area: 66 square miles. Population (1937): [162]
126,929. Density per square mile: 1,923·16. Headquarters: [633]
Dakar.

ALTHOUGH it has fewer inhabitants than most of the other colonies [101] and a lower density of population than Dahomey or the Ivory Coast, Senegal is the most important of all the members of the Federation. Much of the colony is semi-desert, but the remainder is closely settled by some of the most vigorous and progressive peoples of French West Africa. Most of the native citizens are Senegalese, 162 and the fame of the tirailleurs is known in every land. The colony contains some of the earliest French settlements, and its honourable 648 position is attested by the fact that it alone in the Federation sends a direct representative to the Chamber of Deputies at Paris.

The full title of the District of Dakar is the *Circonscription de* 633 *Dakar et Dépendences*. Besides the town of Dakar it includes Goree, Rufisque, the territory round them, and a few small enclaves inside Senegal. One of these enclaves is at Sebikotane, where is situated the William Ponty School. The District has been a separate political entity since 1924, and its Administrator is not responsible to the Governor of Senegal.

The British colony of the Gambia has all its land frontiers with 131 Senegal.

The greatest distance from north to south in Senegal is 249 miles, and the greatest from west to east is 365 miles. The colony extends from 12° 19′ N. to 16° 42′ N. and from 17° 20′ W. to 11° 20′ W. The extreme west of the Cape Verde peninsula is 17° 32′ W.

Boundaries. The Atlantic Ocean forms the main western boundary. The only exceptions to this are the frontier with the Gambia and the boundary between Senegal and Dakar. The latter leaves the coast at 14° 49′ N. and runs roughly south-south-east until it is 2 miles from Goree bay. There it turns east and afterwards south to strike the bay 1 mile east of Rufisque.

22:Winterbotham et al. K-4 (no date) 1944 MS37 Senegal MS37
Gambia FC1

S 131 The intercolonial boundary between Senegal and Mauritania begins at 16° 04′ N., 20° 31′ W. It runs east, then north-east, and then south-east to reach the Senegal river 2 miles above St. Louis. The right bank of the river is followed upstream for more than 500 miles until the confluence with the Falémé. This left-bank tributary is pursued, jointly with French Sudan, upstream for 30 miles, but the boundary is east of it for 64 miles, before rejoining it for a further 130 miles. At the end of this last stretch is the meeting-point of French Sudan, Senegal, and French Guinea, and the boundary between the two latter colonies turns west along the foothills of Fouta Jalon. It is fairly straight for its first 60 miles, but later it bends considerably. It crosses the Gambia river 18 miles above Kédougou. It then follows an even more irregular course westwards, but curves north to avoid Youkounkoun. Nine miles north-north-east of this town it turns almost west, and, using one of the headstreams of the Koulountou, keeps this direction as far as 12° 40′ 30″ N., 12° 42′ 45″ W., the north-eastern corner of Portuguese Guinea. From here the international frontier runs due west for 100 miles, ignoring natural features. It then goes south-west for 37 miles and a little north of west for 22 miles before taking a line almost half-way between the Casamance and the Cacheo. It meets the sea at Cape Roxo.

S G 131 The northern frontier of the Gambia leaves the Atlantic coast at 13° 35′ 40″ N. and runs due east for 72 miles. After this the frontier follows a demarcated line which averages a distance of 6 miles from the right bank of the Gambia river. This continues to be the case as far as a point 22½ miles south-west of Tambacounda. The frontier then turns, crosses the river, and reaches a point 6 miles from the left bank. Owing to the river's meanders this is almost on the bank 6 miles below Diabougou. The right-bank procedure is then followed westwards to 13° 21′ N., 15° 46′ 30″ W. From here the frontier goes due south for 12½ miles to latitude 13° 10′ N. This parallel is followed due west to the Allahine river, which marks the last 15 miles of the frontier.

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2. PHYSICAL DESCRIPTION AND GEOLOGY

133 ALMOST the whole colony lies below the level of 200 feet and, except in the province of Haute Gambie, there is a monotonous regularity of feature. Indeed, the coastal dunes north of Dakar afford some of the

most striking topography. In spite of this, there are few wide 133
horizons, for much of the surface is covered with high bush. [137]

The Coastal Belt

The Cape Verde peninsula protects the south of the coast from the Canary current and there is a marked contrast between the smooth sandy shoreline to its north and the muddy estuaries to its south. From St. Louis to Dakar no rivers reach the sea. Behind the dunes which back the coast is a depression into which, baulked of their normal goal, many small seasonal streams empty themselves. This depression is marshy during and shortly after the rains, and at certain places shallow lakes persist. A wider and more permanent area of swamps lies east of St. Louis. It is formed by distributaries of the Senegal and replenished each year by its flood. Lake Guiers is a large perennial sheet of water at the eastern edge of this marshland.

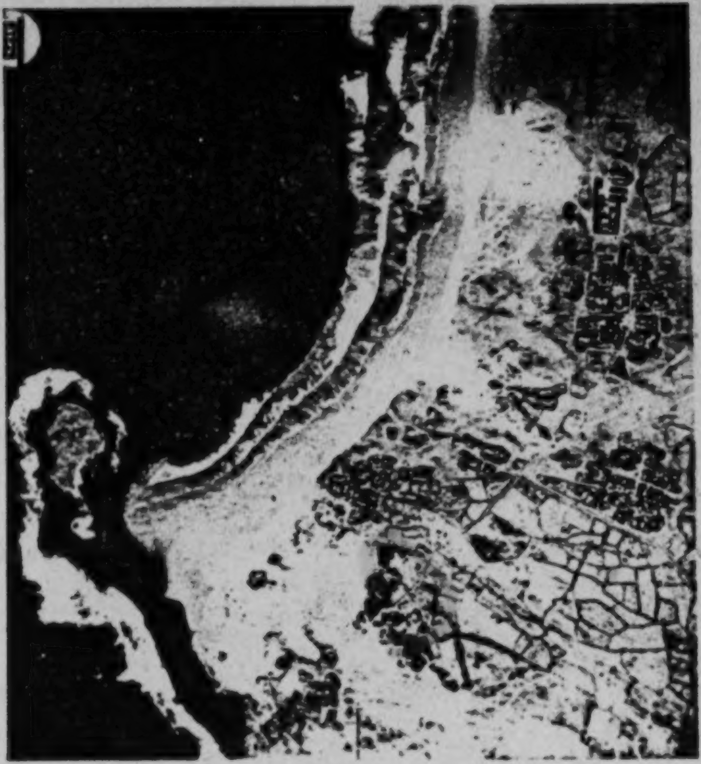
The Interior Plain

North and east of the railways and south and west of the great curve of the Senegal there is a broad Tertiary plain. This is, in effect, a southward extension of the Sahara, and, like that of Mauritania, its surface is formed of low fixed dunes and shallow clay depressions. The general direction of these features is north-east and south-west. Immediately west of Thiès is a prominent line of hills running north
and south. It is formed by an outcrop of Lower Eocene strata [137]
dipping eastward, and it is covered by the Forest of Thiès. For
most of the year the rather friable top soil is dry, but the depressions [134]
become bands of swamp for a few months. Across this general alinement of relief two major valleys run from east to west. One is that of the Ferlo, which flows into Lake Guiers, and the other is that of the Nielloumolé and the Maouré, which are the upper sections of the Sine. The general pattern is edged by the flood plain of the Senegal and its subsidiary channels. The longest of these latter breaks off just below Diorbivol and does not rejoin the main stream until below Podor. It encloses the Île à Morfil, which averages
8 miles wide and is over 300 miles long. Most of the plain is covered [137]
with thornland or poor grass-woodland, but much of the land in the [311]
extreme south-west is highly cultivated.

The South

In the Casamance Territory relief is slightly more varied. The valleys are flat and annually flooded, but the country between rises

107. *Fishermen of the Langue de Barbarie*



108. *The coast near Yof*

[facing p. 398]

133 to an average height of some 130 feet. Rocky outcrops frequently break its lateritic surface, and the rise from the valleys is invariably abrupt.

The south-east of the colony is mainly the basin of the Gambia, but some parts are drained to the Falémé. Much land is over 300 feet, and, as the surface rises to the Palaeozoic sandstones and pre-Cambrian quartzites of Fouta Jalon, the valleys of the Gambia and of its tributaries, the Nieri Mango, the Niocolo Koba, and the Koulountou, are proportionately deeper. The side valleys of the first two, indeed, are little more than very narrow gullies. Just east of the 13th meridian steep hills rise on either side of the Gambia itself, and, some 15 miles west of Kédougou, a broken spur strikes north from French Guinea. Upon it heights of over 1,300 feet rise above scarps of 300 or 400 feet, and, although the river now beheads its northern end, it has forced the Gambia to take a great northward loop. East of Kédougou the country is more open, for the intercolonial boundary follows the scarps that mark the northern limits of Fouta Jalon.

3. THE COAST

THE total distance from the Mauritanian boundary to Cape Roxo is 333 miles, but 40 miles of this are in the Gambia. The coast of Senegal may be divided into four unequal parts: the mouth of the Senegal river, the smooth curve that flanks the interior plain, the Cape Verde peninsula, and the creeks and estuaries of the south.

The Canary current sets southward along the northern part of the coast, but south of Cape Verde it varies with the seasons. From January to June it flows south or south-east, from June to August north or north-west, and in late August east. During the rest of the year it is variable.

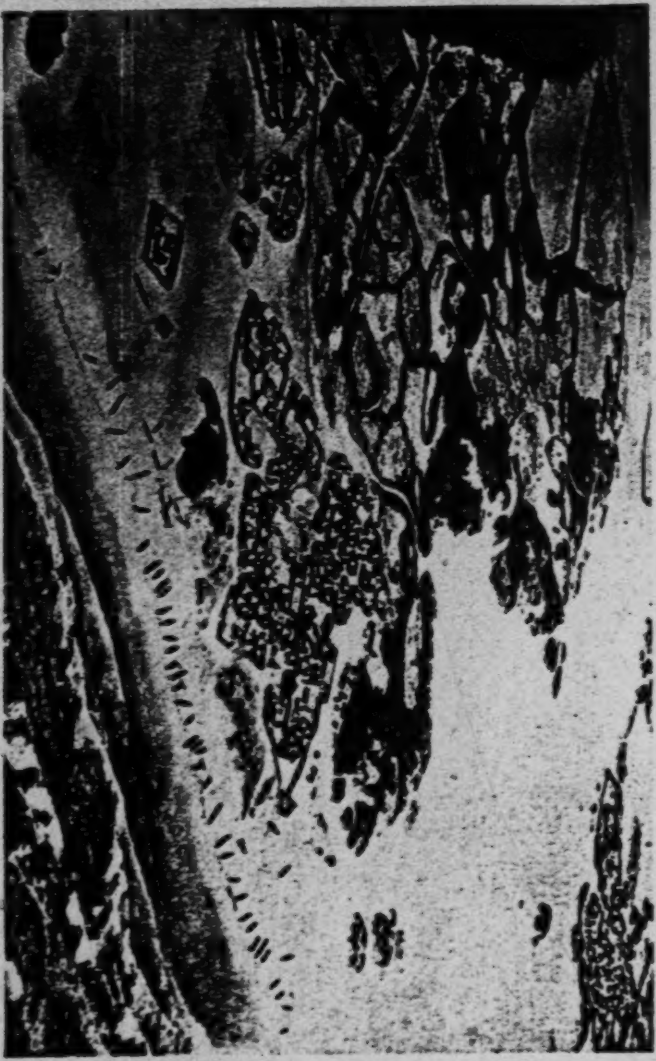
Swell is strong and surf is heavy.

The Langue de Barbarie to the Cape Verde Peninsula

The Langue de Barbarie is some 27 miles long and has been built by the combined efforts of the Canary current and the Senegal. For its last 15 miles it is nowhere more than half a mile wide and it separates the river from the sea. St. Louis (p. 440) stands on an
[361] island in the river, but has three suburbs, two on the Langue de Barbarie and one on the mainland. From this mainland suburb, Sor,
[496] the railway begins its journey to Dakar. Across the mouth of the

22:Winterbotham et al. K-4 (no date) 1944 MS37 Senegal MS37

133



109. *Yof*

[facing p. 399]

22:Winterbotham et al. K-4 (no date) 1944 MS37 Senegal MS 37

river is a sandy bar which sometimes prevents entry by ships for 133 several weeks on end. After this the coast stretches south-southwestwards in a gentle curve of sandy beach. There are dunes along the shore, and, inland from them, the marshy depression already described on p. 397. There are very few villages and, indeed, very few landmarks of any kind. Seventy-four miles from the mouth of [361] the Senegal the village of Kayar is perceptible from the sea. It is connected to Rufisque (17 miles) by a colonial road, and immediately [491] south of it is Lake M'Baouar, which is seldom or never without water. After Kayar the coast trends more definitely south-west. Lake Retba, whose north-eastern end is 6½ miles from Kayar, is a permanent salt lake fed by the sea. There are other lakes and swamps behind the littoral dunes. On the coast itself stands another village, Cambérène, [361] which is 22½ miles from Kayar and behind which rise the Petites Mamelles. These are three grey, isolated, sandy knolls, and they mark the beginning of the Cape Verde peninsula (Fig. 48).

The Cape Verde Peninsula and Goree Bay

Yof island (Plate 108), 3¼ miles west of Cambérène, stands off the [361] village (Plate 109) of the same name. The beach on the mainland is accessible to surf-boats in all weathers. Just west of the village is a [206] cable hut, where cables are landed, and a tarmac road runs south- [491] wards to Ouakam and Dakar. The coast is now more indented, and, 2½ miles south-west of Yof, is a ledge of rocks which joins the shore to Ngor island and behind which is the village of Ngor. Three- [361] quarters of a mile farther west the coast turns almost due south to reach Almadi point (Plate 110), the extreme west of the mainland of Africa. There is a lighthouse on a rock three-quarters of a mile [502] out to sea. Cape Verde itself is 2 miles to the south-east of Almadi point, and behind it are two conical hills called the Mamelles. It [137] was the stunted brushwood on these hills that gave the cape its name. [103] From here to Cape Manuel the coast continues its south-easterly direction, being formed of red cliffs and small sandy beaches. Fann point, 3¾ miles from Cape Verde, marks the north-western end of Madeleines bay, which washes the south-western side of Dakar (p. 444). Some 2 miles south-west are the four Madeleines islands, all of which are rocky and three of which are inaccessible. At Cape Manuel, which is 131 feet high, the coast turns sharply north to form Bernard bay. North of Dakar is Hann bay, and both of these small bays are on the western side of Goree bay. This is generally [504] considered to stretch from Cape Manuel to Cape Rouge, and in it,

133 1½ miles off shore from Dakar, is the historic island of Goree (p. 449).
[504] The bay is protected by the Cape Verde peninsula and affords good
anchorage at a depth of 11 fathoms, and its beaches provide numerous
landing-points for ships' boats.

[361] The village of Hann, in the middle of the shore of Hann bay, is a

102
491
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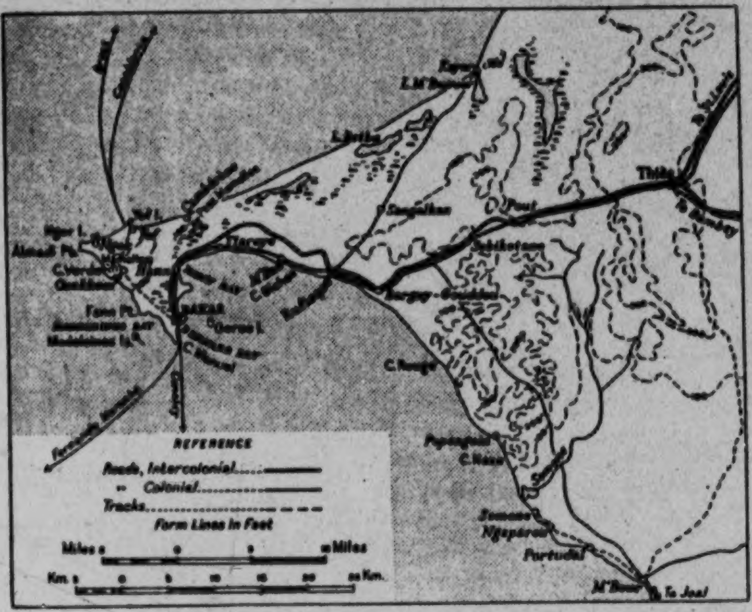
Thiès
Pout
Sangalkam
L. Retba
Sebikotane
Bargny-Gouddou
DAKAR
Goree I.
Fann Pt.
Almadi Pt.
Ngor I.
C. Verde
C. Manuel
C. Rouge
C. Naze
Ngaparou
Portudal
M'Bour
To Joal
REFERENCE
Roads, Intercolonial
" Colonial
Tracks
Form Lines in Feet
Miles
Km.

FIG. 48. *The Cape Verde Peninsula*

133
[361] seaside resort for the inhabitants of Dakar. There is also a botanical
[369] garden. The intercolonial road and the railway run near the sea and
[491] are never far from it until they pass Bargny-Gouddou. North-east of
[496] Hann there is a narrow lagoon between the sea and the road, and the
coast bears away north-east, east, and east-south-east for the ~~11~~ miles
to Rufisque (p. 449). There is much marshland, and the sole feature
[361] of note is Cape Biches, a low promontory 2 miles before the town.
Bargny-Gouddou is 3 miles east-south-east of Rufisque, and beyond
it the coast is cut up by creeks and lagoons, which have small seasonal
rivers running into them. Behind them are scattered sandhills which
rise eastwards to hills of 200 and 300 feet. Cape Rouge, which barely
projects into the sea, has red cliffs intersected by wooded ravines.

22:Winterbotham et al. K-4 (no date) 1944 MS37 Senegal MS37

Cape Rouge to Sangomar Point

The hills are near the shore at least as far as the Somone, but the shoreline is fringed with sandy beaches and occasional mangrove swamps. Popenguin, 6 miles from Cape Rouge, has a Roman Catholic church, and, 1½ miles farther, Cape Naze rises to 236 feet. Inland there is a hill of 400 feet. Three miles beyond the cape the river Somone finds its way to the sea through a patch of mangrove-woodland. The coast runs south-eastwards by means of a series of small bays, and the country is more settled and cultivated. A number of sandspits can also be distinguished. These have been built by the prevailing current, and they have either blocked or diverted the short streams and marigots. From the village of Somone, which is a little distance from the river of that name, there is a minor road to Ngaparou, Portudal, and M'Bour (p. 450). Portudal's great days are over, but ships can still anchor about 3½ miles off shore in a depth of 5½ fathoms. There is a reef to seaward of the beach, but west of the village a break allows access to a creek, where landing is possible. There are many other reefs and shoals off this part of the coast. Inland, the road is continued near the shore to Joal, but in many places its surface is very rough indeed. Two miles beyond M'Bour the Balling, a seasonal river, meets the sea, and, 3 miles farther still, is Nianing, a local centre for tracks. From here the coast runs almost due south to Sarène point, a low and sandy promontory. After this the road goes inland a little to avoid a shallow bight, heavily fringed with mangroves and crossed by several marshy streams. South of this, and 1 mile north of Senti point, is the village of Ngazobil, conspicuous by reason of its Roman Catholic church. Joal (p. 450) is 2½ miles farther south-east. From this place onwards the coast is extremely swampy and is cut up by creeks and estuaries. Only the principal features can be noted here. 133 361 [368] [491] [491] [491] [368]

Eleven and a half miles beyond Joal stands the little village of Diakhanor. This marks the northern end of a strip of land which is strongly reminiscent of the Langue de Barbarie. It has been built by the Saloum and the sea, and it separates them for about 10 miles. An old mouth of the river is clearly observable 6 miles south of Diakhanor, and the end of the strip is called Sangomar point.

Sangomar Point to the Frontier of the Gambia

The Saloum is navigable upstream for sea-going vessels for about 100 miles, and on its banks and those of its tributary the Sine [505] [487]

[p 402]

102
103
133
491
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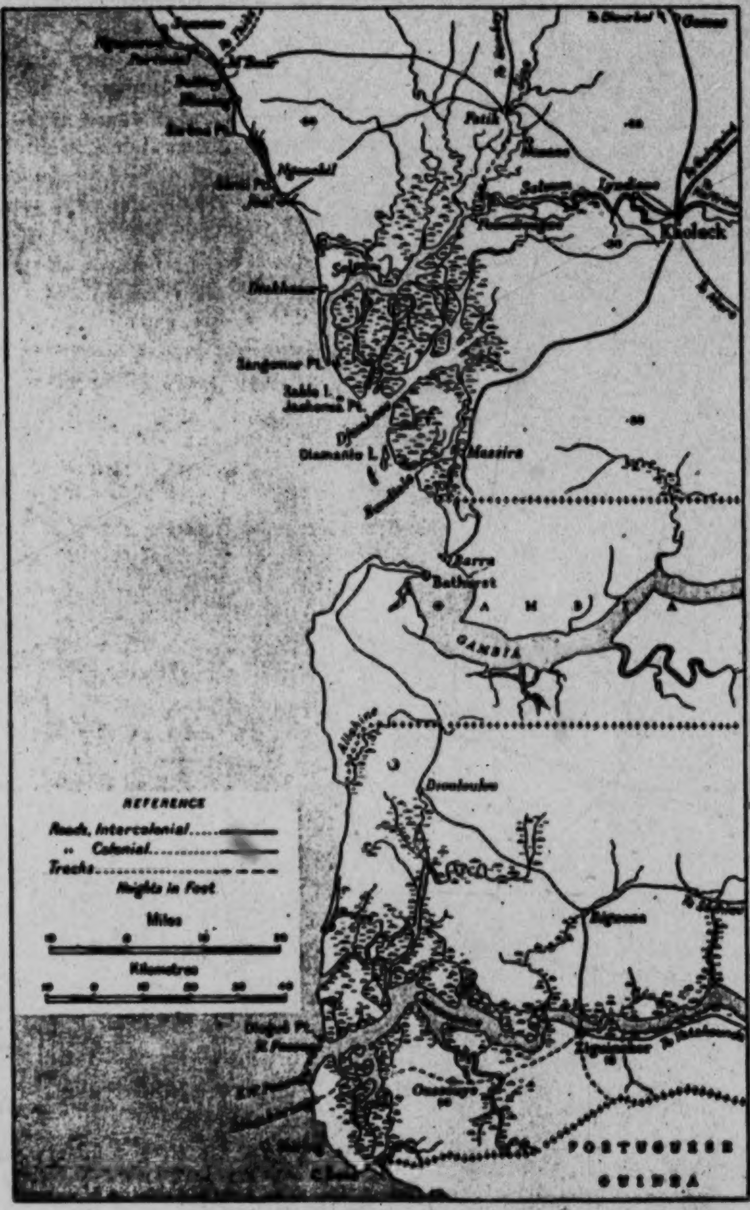

Fatik
Kaolack
Sangomar Pt.
Sable I.
Diamanio I.
Barra
Bathurst
G A M B I A
GAMBIA
REFERENCE
Roads, Intercolonial
" Colonial
Tracks
Heights in Feet
Miles
Kilometres
Ziguinchor
PORTUGUESE
GUINEA
C. Roxo

FIG. 49. *Senegal: the Coast from Ngaparou to Cape Roxo*

are the ports of Foundiougne (p. 451), Lyndiane, Kaolack (p. 452), 133
and Fatik (p. 451). Its entrance is obstructed by a bar of shifting [361]
sandbanks. The principal channel, the New Passage, is immediately [505]
east of Sangomar point and has a width of 650 feet and a depth of [487]
11½ feet. Inside the bar the river is rather deeper. Four miles south-south-east of Sangomar point is Sable island, 2¾ miles east of which is Jackonsa point. This marks the west side of the imposing estuary of the Djomboss, which is a distributary of the Saloum, but which is also connected to the Bandiala and the Gambia. Southwards there are many shoals and several islands, and navigation is difficult. The largest of these islands is 3 miles long and its northern tip is 7 miles from Jackonsa point. Its southern tip is almost opposite another wide estuary, the Bandiala, the source or terminus of a score of muddy creeks. Four miles south-east of this estuary is the frontier of the Gambia. The next 40 miles of coast are, therefore, in British territory.

Allahine River to Cape Roxo

It has already been noticed that the Allahine (San Pedro) river forms the international frontier between the Gambia and Senegal. The mouth of this river is blocked by sandbanks, so that it connects with the sea only at high tide. For the next 18 miles the coast is flat and treeless, with white sandy beaches on which the sea breaks heavily. There are no landing-points, and off-shore depths are very shallow. After that there are some minor waterways, and, 33 miles from the Allahine, Diogué point marks the northern shore
of the estuary of the Casamance. This river, 2 miles wide at its mouth, [505]
is navigable as far as Ziguinchor (p. 453) for vessels drawing 15 feet, and as far as Sedhiou (p. 454) and Kolda for smaller craft; but the last 35 miles of its course are through mangrove swamps. The entrance to the estuary is partly blocked by a bar, but there are two places where this may be crossed. One of these, the North Passage, is off Diogué point and has a depth of 13½ feet, and the other, the South-West Passage, is 1½ feet deeper. The coast that faces this passage has
a low sandy beach backed by dunes, and the village of Diembering,
8 miles south-south-west of Diogué point, is behind these dunes. [361]
The coast curves gradually south-eastwards, still exhibiting the same features but with a number of shallow bays, and between Cape Skiring and Cape Roxo there are many rocks off shore. The latter cape is also low and sandy, and it marks the international frontier with Portuguese Guinea.

221 Winterbotham et al. K-4 (no date) 1944 MS37 Senegal MS 37

4. CLIMATE

132
654
361

Meteorological Stations mentioned in Text and Tables

	Latitude N.	*Longitude W.*	*Altitude in feet*
Podor	16° 35′	15° 02′	49
St. Louis	16° 01′	16° 30′	25
Matam	15° 38′	13° 13′	c. 70
Linguéré	15° 21′	15° 11′	c. 90
Bakel	14° 53′	12° 24′	c. 90
Thiès	14° 49′	16° 52′	207
Bambey	14° 40′	16° 25′	59
Dakar	14° 39′	17° 25′	105
Kaolack	14° 07′	16° 07′	17
Tambacounda	13° 45′	13° 39′	154
Kédougou	12° 33′	12° 10′	433
Ziguinchor	12° 32′	16° 21′	18

132 LIKE that of French Guinea, the colony's climatic year is divided into two distinct periods: a dry season from October to May, and a wet season from June to September. The former has north-east winds, generally clear skies, and a large range of temperature; and the latter, introduced by tornadoes, is more equable and has south-westerly winds, much cloud, and high humidity. Imposed upon this general pattern is the influence of the trade winds, which, in the dry season, keep the coast north of Dakar cooler and moister than the interior. The weeks immediately preceding the wet season are very oppressive.

Pressure (Fig. 58)

Senegal lies between the belts of northern tropical high pressure and equatorial low pressure. Although the movements of these two are very considerable during the course of a year, the local effect is negligible. Fig. 58 shows that surface pressure lies between 1012 mb. and 1014 mb. all the year, and that seasonal changes are concerned rather with the direction in which it decreases. The gradient in January is from north to south, but in July it is from south-west to north-east. Extreme variations are within 3 mb. on either side of the means.

TABLE I. *Mean Daily Pressure* (1000+*millibars*) *reduced to sea-level and corrected to 32° F. and latitude 45°*

Station	*J.*	*F.*	*M.*	*A.*	*M.*	*J.*	*J.*	*A.*	*S.*	*O.*	*N.*	*D.*	*Year*	*Annual Range*
St. Louis	13	12	11	11	10	10	13	11	12	12	12	13	12	3
Dakar	13	12	11	11	11	13	12	12	12	12	12	13	12	2
Kaolack	11	10	09	09	09	12	13	11	11	11	11	11	11	4
Ziguinchor	12	11	11	11	11	13	14	15	13	12	12	13	12	3

22:Winterbotham et al. K-4 (no date) 1944 MS37 Senegal MS 37

132

There is a fairly regular diurnal range, amounting to 2 or 3 mb. near the coast and to 3 or 4 mb. inland. Maxima occur at about 10.00 a.m. and 10.00 p.m. and minima at about 4.00 a.m. and 4.00 p.m., the day extremes being the more marked. Irregular variations are infrequent and slight.

Winds (Fig. 50)

Surface Winds. As may be expected, there are two main winds: the north-easterlies and the monsoon. The former are composed of two distinct currents, the trades and the harmattan, and the difference between them has been explained on pp. 314–15. Each of the three currents brings different weather, according as the two systems swing north and south.

In January a strip of country some 40 miles wide along the coast north of Rufisque is under the trades, and the rest of the colony is covered by the harmattan. The monsoon does not appear. This state of affairs continues through February and March, but by April the monsoon is pushing north, and from that time until July the trades and harmattan retire before it. By August the monsoon, then at its strongest, covers the whole country. From September to January the monsoon is retreating and the trades and harmattan are re-establishing themselves.

None of the three currents is very strong or very deep. The annual means at most stations average from 2 to 4 m.p.h. The trades, however, are rather stronger and the annual means along the north-west coast are between 7 and 11 m.p.h., with speeds above the average in the north from January to March and below it from August to October. The mean speed of the harmattan is only about 4 m.p.h., and this fact is very evident in the quieter conditions that obtain when it intervenes in the trades and reaches the coast. The monsoon is also feeble, and, although many stations register their highest speeds as it advances, calms are frequent when it is established. It is always weaker on its northern edge than over the coast. Trades and harmattan are about 3,000 feet deep. The monsoon is the same along its northern border, but over the south in August it attains 6,000 feet. Winds of rather greater force may be met in the upper layers of all three currents.

When the seasonal wind is firmly established there is a fairly regular daily rhythm. Nights are calm except when the trades are blowing at their strongest. Winds are light in the early morning, and rise to their maximum in the afternoon or evening. Along the coast sea- and land-breezes frequently alter the direction of the trades and the strength of the monsoon. At St. Louis, for instance, the land-breeze gives the trades a distinct easterly component in the morning, and during the day they are often north-westerly, being sucked inland from the sea. At Dakar observations from the north-east quadrant are, both for each month and for the year, higher at 7.00 a.m. than at 2.00 p.m. and those from the west at 2.00 p.m. than at 7.00 a.m. The land-breeze is the stronger in the dry season, the sea-breeze in the wet. The former strengthens the harmattan, the latter the monsoon.

Since tornadoes occur on the northern edge of the monsoon, the tornado season is from July to October over most of the colony, and the average number is about 20 per annum. In the Casamance Territory they are experienced as early as May. They are accompanied by intense lightning and thunder, and usually by torrential rain; but those which come after the wet season are often dry. Farther north they are less violent. Inland they blow up at any hour and always from the east; but on the coast they frequently occur at night and often move from south to north. The sea-breeze may prevent the formation of those cumulus clouds which are, in the interior, a normal feature of the day preceding a tornado.

Upper Winds. Above the sea- and land-breezes and the three surface currents are easterly winds, and above them again light westerlies. The boundary between the two last is always higher in the south.

During the dry season the upper surface of the easterlies lies above the trades or harmattan at a mean height of from 5,000 to 10,000 feet over the Senegal and about 15,000 feet over the Casamance. When the easterlies lie above the monsoon they extend to very great heights, at least 25,000 feet in the north and 30,000 feet in the south. There are, however, great diurnal and even hourly variations: at times the easterlies form only a very thin belt in the north, and on at least one occasion the westerlies have been noted directly above the trades over Dakar.

The easterlies are continental in origin and carry a dust haze, and for this reason it is difficult to define their base above the harmattan. By some meteorologists, indeed, they are considered to be the same current, but they may easily be distinguished from the other two surface winds. They are some 10°–15° warmer and 15–50 per cent. drier than the trades, but they are several degrees colder and drier than the upper surface of the monsoon. The speed of the easterlies is about 5–15 m.p.h. at their base and 15–25 m.p.h. in their higher levels. A shallow zone of calm air is often found along their junction with the monsoon.

Little is known about the westerlies, but at their base their temperature is several degrees lower and their relative humidity higher than

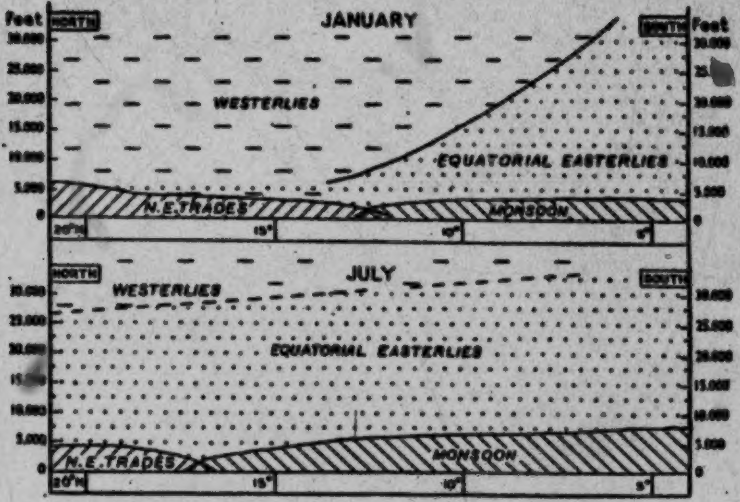

Feet
NORTH
JANUARY
SOUTH
Feet
30,000
25,000
20,000
15,000
10,000
5,000
0
WESTERLIES
EQUATORIAL EASTERLIES
N.E.TRADES
MONSOON
20°N
15°
10°
5°
NORTH
JULY
SOUTH
WESTERLIES
EQUATORIAL EASTERLIES
N.E.TRADES
MONSOON
20°N
15°
10°
5°

FIG. 50. *Vertical Distribution of Wind: Longitude 16° W.*

those of the top of the easterlies. Their speed is usually less than 15 m.p.h., but above 35,000 feet it is occasionally very much more.

Rainfall, Cloud, and Thunder

Rainfall (Fig. 59). Since rain is brought by the monsoon, the wet season in the south is longer and opens earlier. About one-third of the annual total falls in August. As a general rule, rain is heavier in the south and along the coast. In the north-east of the colony the year's total is received from a few isolated storms, but their effect on rivers, roads, and vegetation is much more pronounced in the interior. Except along the coast, where there is much at night, most rain falls in heavy showers during the afternoon. Amounts for any twenty-four hours may be heavy enough to dislocate communications, but even at the height of the season several fine days normally separate two wet ones.

132

TABLE II. *Mean Rainfall*

R = Rainfall in inches. X = Maximum fall in 24 hours. D = Number of rain-days.

Station	*Yrs'. obsn.*		*Jan.*	*Feb.*	*Mar.*	*Apr.*	*May*	*June*	*July*	*Aug.*	*Sept.*	*Oct.*	*Nov.*	*Dec.*	*Year*
COAST															
St. Louis	9–10	R	0·05	..	..	..	0·07	0·34	2·18	7·66	4·04	0·96	0·14	0·02	15·46
		X	0·26	0·05	0·02	..	0·30	0·69	2·23	3·31	3·10	1·54	0·55	0·10	3·31
		D	0·7	0·3	0·1	0·1	0·6	1·7	4·6	12·4	8·4	2·7	1·0	0·6	33·2
Dakar	10	R	0·02	0·02	0·06	0	..	1·15	3·31	10·41	5·71	1·63	0·17	0·05	22·68
		X	0·06	0·09	0·15	0	0·03	2·23	5·94	8·42	2·85	3·78	1·00	0·08	8·42
		D	0·6	0·3	0·2	0	0·2	2·4	8·8	15·1	12·6	4·0	0·8	0·4	45·4
Ziguinchor	10	R	..	0·05	0	..	0·45	5·61	16·03	21·96	13·31	6·27	0·32	..	64·00
		X	0·01	0·47	0	0·06	1·23	2·79	5·95	8·51	5·16	4·68	0·50	..	8·51
		D	0·2	0·1	0	0·1	1·4	10·1	22·0	24·5	20·7	11·0	1·4	0·1	91·5
INTERIOR															
Podor	10	R	0·04	0·03	0·11	0·01	0·19	0·61	3·30	5·77	2·10	0·73	0·21	0·03	13·13
		X	0·26	0·27	0·67	0·08	1·06	1·30	4·55	4·20	1·72	1·12	1·22	0·24	4·55
		D	0·3	0·1	0·4	0·2	0·7	1·6	4·5	8·4	5·5	1·7	0·4	0·3	24·1
Matam	10	R	0·10	0	0·02	0	0·10	2·78	5·53	8·54	4·86	0·59	0·02	..	22·54
		X	0·50	0	0·17	0	1·36	5·32	5·71	7·50	2·26	1·11	0·08	0·01	7·50
		D	0·2	0	0·2	0	0·8	4·8	7·2	10·9	7·8	1·6	0·4	0·1	34·0
Linguère	10	R	0	0·01	0·35	0	0·10	1·24	4·86	10·63	5·66	2·00	0	0	24·85
		X	0	0·04	1·06	0	0·39	0·92	2·63	4·02	2·91	1·03	0	0	4·02
		D	0	0·2	0·6	0	0·4	4·2	7·8	13·2	10·0	4·6	0	0	41·0
Bakel	10	R	0·06	0	0	0·01	0·22	1·93	4·06	7·11	6·14	1·10	0·08	0·09	20·80
		X	0·59	0	0	0·10	1·28	2·07	3·52	5·45	3·01	1·65	0·12	0·01	5·45
		D	0·1	0	0	0·1	0·8	4·6	7·6	9·1	8·4	2·2	0·2	0·2	33·3
Tambacounda	10	R	0·02	0·03	0·04	0·14	1·11	6·85	7·62	11·96	8·49	3·18	0·11	0·01	39·56
		X	0·08	0·28	0·32	1·13	2·24	3·34	4·00	5·79	4·74	2·21	0·84	0·06	5·79
		D	0·2	0·1	0·3	0·2	2·0	9·5	12·1	17·0	13·2	5·4	0·7	0·2	60·9
Kédougou	10	R	0·02	0·01	0·04	0·06	2·82	7·15	10·30	11·57	12·81	4·71	0·69	..	50·18
		X	0·17	0·06	0·28	0·16	3·19	2·95	3·98	6·26	3·70	1·87	2·21	0·02	6·26
		D	0·1	0·1	0·2	0·6	4·4	12·1	14·1	17·1	16·5	9·6	1·4	0·1	76·3

Mean [illegible] be used with reserve, for in Senegal, as in the re[illegible] West Africa, variations are considerable. At St. Louis, for example, only 5 inches of rain fell in 1903, but there were 26 inches in 1912. At Dakar the 1937 total was 15 inches, but that of 1938 was 27 inches. The September fall of Tambacounda was 0·71 inch in 1937 and 9·45 inches in 1939.

Hail has been recorded in the colony, but quite irregularly.

Cloud. Although records are only available from stations near the coast, there is always more cloud in the south, and the monsoon brings a general increase. Since the amount of cloud is closely allied to the rainfall, the pall of cloud advances north from April and then retreats.

The mean for the dry season is 2 to 4 tenths of sky covered. The wet has 4 to 8 tenths in the north and 6 to 9 tenths in the south, with higher figures in the morning except along the southern coast. Nights are normally clear. The harmattan is almost cloudless both by day and night, but cirrus and alto-stratus often mark the base of the westerlies during the dry season. The trades usually carry light cumulus clouds by day, but only near the land. The monsoon cumulus, whose base lies at about 1,500 feet, is heavier. Rain falls from nimbus and cumulo-nimbus. At the height of the wet season in the south nights are occasionally as cloudy as days, but even then a uniformly overcast sky is uncommon.

A tendency to greater cloudiness has been noted in two areas: along the coast just south of Dakar and, during the monsoon, on the windward slopes of the northern spurs of Fouta Jalon.

Thunder. Thunderstorms are almost unknown in the dry season, and are rare at sea off the colony at any time of year. They occur during the rains, with a maximum between July and September. In the north there are from 25 to 30 per annum with about 8 in the worst month. They are more numerous in the south, and the annual total varies from 80 or 90 on the coast to 40 or 50 inland. The average for September, their worst month, is 10 at Tambacounda and 20 at Ziguinchor. The first and last storms are often dry, i.e. without rain falling on the ground. Along the coast thunder is associated with a tornado at night but not necessarily by day.

Temperature and Humidity

Throughout the year temperatures are high and rarely fall below 60°. In the dry season the cooler nights and lower humidity are not

22:Winterbotham et al. K-4 (no date) 1944 MS37 Senegal MS 37

132 unpleasant, but the afternoons are hot. Between July and September the rainfall is sufficient to lower day temperatures except in the north-west. Nights, however, remain hot and the humidity rises, so that this season is most oppressive.

Temperature. Table III indicates clearly the essential points of the seasonal changes: the lower temperatures on the coast as compared with the same latitude inland; the single maxima at St. Louis and Dakar and the secondary rise after the rains at all other places; the greater diurnal range in the dry season; and the smaller seasonal changes in the south, especially on the coast.

The coolest hour is just before dawn and the hottest in mid-afternoon, and the average diurnal range in the dry season is some 25°–30°. Temperatures in the open may be as much as 20° higher or lower than screen figures. Irregular variations are rare, but rain and tornadoes cause an abrupt fall of several degrees, and along the coast when the sea-breeze takes the place of the harmattan temperatures may fall by a dozen degrees in as many minutes.

The level at which freezing-point is reached is rarely below 15,000 feet. Serious icing is only experienced in well-developed cumulo-nimbus clouds.

TABLE III. *Means of Daily Maximum and Minimum Temperatures*

Station	*J.*	*F.*	*M.*	*A.*	*M.*	*J.*	*J.*	*A.*	*S.*	*O.*	*N.*	*D.*	*Year*	*Annual Range*
St. Louis	85 60	85 61	83 63	77 63	79 66	86 74	89 77	90 77	91 77	89 76	88 70	85 63	86 69	14 17
Lingueré	93 56	97 59	100 63	107 67	110 72	107 76	99 75	92 74	93 73	97 73	95 63	93 59	99 67	18 20
Dakar	82 65	83 64	82 65	80 65	82 68	88 74	88 77	87 76	88 77	88 76	87 73	83 68	85 71	8 13
Kaolack	95 61	98 63	101 65	105 66	104 71	99 76	94 75	91 75	91 74	93 73	97 67	94 64	97 69	14 15
Tambacounda	95 59	99 61	100 67	106 70	103 76	97 74	90 72	87 72	89 72	90 72	96 63	93 59	96 68	19 17
Ziguinchor	91 60	94 63	96 67	96 68	95 72	90 75	88 74	85 74	87 74	89 74	90 71	87 65	91 70	11 15

Humidity (Fig. 51). The figures of Table IV show no very great extremes, but both the highest, with the monsoon, and the lowest, with the harmattan, can be very distressing.

132 hand, in September at Ziguinchor, for example, the midday mean rises as high as 48 miles, although at that time of year interference from cloud is greatest. Whatever the season, conditions are better at midday and in the evening than in the morning.

Temporary deterioration is caused by sand storms, fog, bush fires, and rain. The first occur during December and January over dunes such as those in Fouta and Ferlo. In them visibility may drop to less than 100 yards and the ensuing haze persists for several days over large areas. Fog is common before and after the rains and is to be expected over the southern estuaries at any time of the year when winds are light. It rarely extends above 500 feet or lasts after 9.00 a.m. Between February and April there is local interference from the smoke of bush fires, which rises 2,000 or 3,000 feet. In the wet season heavy rain naturally causes temporary deterioration. At this season also low cloud often blots out the tops of the spurs of Fouta Jalon.

Swell and Surf

133 Details of swell at Dakar are given in Appendix II, and they may be taken as typical of conditions along the whole of the coast of the colony. On beaches farther north there is slightly more north-westerly swell and on those to the south rather more from the south-west. Heavy seas are rare.

Surf, on the other hand, is everywhere heavy. On exposed beaches south of Cape Verde, for instance, rollers sometimes curl in 30 feet of water and break in a depth of 10 feet. Surf is especially dangerous at the mouths of estuaries when a strong ebb-tide is running.

Meteorological Services

654 [207] Dakar is the chief meteorological station in French West Africa, and St. Louis, Tambacounda, and Ziguinchor are also fully equipped for recording both surface and upper air conditions. Their reports are included in the synoptic broadcasts from Dakar, which cover the whole of the west coast. Secondary stations are at Bambey, Kaolack, Linguéré, Podor, and Thiès, whose reports are also included. Twenty-six other places record rainfall.

5. VEGETATION

137 Most of the colony falls within two of the main vegetation zones. To the north there is the thornland, while to the south the zone of grass-woodland has two subzones, the Sudan and the Guinea, and

22: Winterbothain et al. K-4 (no date) 1944 MS37 Senegal MS 37

132

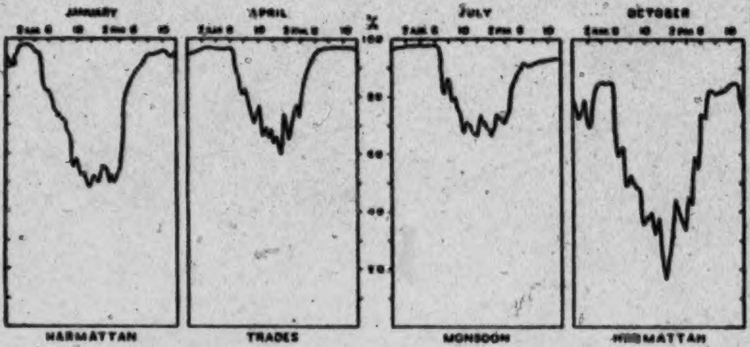


FIG. 51. *Relative Humidity at Dakar*

Relative humidity is always highest in the west and south. Variations from the mean are greatest during the dry season and in the interior. Along the coast the relative humidity rises noticeably in the afternoon, when the sea-breeze displaces the harmattan.

TABLE IV. *Mean Relative Humidity (percentages)*

Two observations: 8.00 a.m. and 6.00 p.m. Three: 8.00 a.m., 1.00 p.m., and 6.00 p.m.

Station	*J.*	*F.*	*M.*	*A.*	*M.*	*J.*	*J.*	*A.*	*S.*	*O.*	*N.*	*D.*	*Year*	*Annual Range*
St. Louis	59	68	76	87	82	81	81	85	85	82	66	60	76·0	26
	33	44	54	73	69	67	67	70	70	66	46	47	58·8	37
	55	63	68	79	75	74	71	74	73	74	66	61	69·4	24
Dakar	67	76	84	87	84	83	81	86	87	86	78	67	80·5	20
	43	45	53	58	59	63	67	73	72	67	58	44	58·0	30
	50	51	59	65	69	70	70	77	76	72	62	57	64·8	27
Kaolack	59	63	70	76	77	84	88	93	94	92	75	64	77·9	35
	33	29	30	34	43	54	67	79	76	67	43	39	49·5	50
Tambacounda	39	40	42	49	57	76	86	92	92	92	79	59	66·9	53
	16	16	16	16	28	47	65	76	74	70	47	31	41·8	60
Ziguinchor	75	82	86	86	87	90	95	96	96	94	87	77	87·6	21
	40	42	44	42	49	63	76	81	75	72	57	49	57·5	41
	42	44	46	52	56	65	81	86	81	76	63	57	62·4	44

Visibility

Annual means are from 9 to 11 miles at 8.00 a.m., from 12½ to 18 miles at 1.00 p.m., and from 12½ to 16½ miles at 6.00 p.m. with the higher figures in every case to the south. In general, visibility is best in the trades and monsoon and worst in the harmattan and easterlies. In the harmattan it is normally only from 2½ to 5 miles and may be less than 1 mile for several days on end. On the other

22:Winterbotham et al. K-4 (no date) 1944 MS37 Senegal MS37

one coastal area, the Casamancian. Except in these last two belts the climate is deficient in rainfall, and it is the length of the dry season that controls the distribution of plant communities. 137

Along the coast as far south as the Cape Verde peninsula is the southward extension of the sub-Canarian area, a description of which has been given on p. 320.

The Thornland

The thornland occupies the northern part of the colony from a little north-east of Dakar eastwards to Kidira and northwards to the Senegal. This region, it will be recalled, has a rainfall of from 10 to 20 inches. It is a country of spiny shrubs, especially species of *Acacia*, associated with which are the soapberry tree, the African myrrh, and *Combretum aculeatum*. Many of the trees and shrubs are without leaves during the dry season, but some are evergreen. The natural vegetation in this zone has been much devastated by fire, pasturage, and the over-exploitation of the gum-yielding acacias. [314] On the other hand, annual firing of brushwood and grassland plays a subordinate part in modifying the plant life. The more open nature of both the woody and herbaceous vegetation impedes or prevents fires spreading over great extents of country. Tufted grasses are particularly abundant in the open grasslands between, and even under, the trees and bushes.

The Grass-Woodland

If the Casamancian area be considered as a modification of the Guinea subzone, the grass-woodland may be said to occupy the remainder of the colony. The Sudan subzone is, however, the more important. In the western part of the colony the subzones run north-west to south-east, extend across the Gambia, and then turn almost due west and east. The northward bend in the west is due to oceanic climatic influences, and the modified Casamancian area is similarly due to a greater humidity. The vegetation of the zone as a whole consists of a mixture of trees and grasslands, the former either being spaced in clumps or patches or standing as individuals. The grasslands are continuous over wide areas and are fired regularly in the dry season. This firing of brushwoods and grasslands, together with centuries of heavy cultivation, has highly modified the natural vegetation, especially towards the west. This is especially exemplified by forest destruction in the Guinea subzone. [241]

The vegetation of the Sudan subzone corresponds to an annual

137 rainfall of from 20 to 60 inches. In appearance it is reminiscent of a park or orchard, with well-spaced trees or small clumps of trees projecting well above the herbaceous layer, and the most characteristic trees are from 18 to 45 feet tall. The most frequent in Senegal are the African locust bean, the tallow tree (*Detarium senegalense*), the ginger-bread plum or pomme du cayor (*Parinari macrophylla*), various legumes (*Cassia sieberiana*, *Entada africana*, *Acacia sieberiana*, *Albizzia ferruginea*, *Prosopis africana*, *Cordyla africana*, and *Pterocarpus erinaceus*), the Borassus palm (*Borassus aethiopum*), *Combretum glutinosum*, *Terminalia macroptera*, *Sterculia setigera*, *Cola cordifolia*, and the Meni oil tree. Shrubs and climbing woody plants are locally associated with the trees, but plants growing on the trunks and branches are generally absent. Parasites of the mistletoe family, however, are common. Most of the trees lose their leaves at the advent of the dry season. The grasslands consist mainly of grasses of the tribe Andropogoneae.

Excluding the Casamancian area, the Guinea subzone occupies two small regions north-west and south-east of the Gambia. At one time parts of this subzone were covered by dense forests, but to-day
[311] there are only scattered relicts. Much of the country is cultivated, and the rest is subjected to the continued degrading influences of fire, grazing, and shifting cultivation. As a consequence, a degraded brushwood on impoverished soil represents the weed flora of several years' fallow. This is cut down, and the cultivation of ground-nuts
[241] and cereals follows for a period of years; after which the ground is again allowed to go fallow. Many of the weeds are of American or Indian origin.

The Casamancian Area. The Casamancian area (Vol. I, p. 101) is the most tropical part of the colony. The Casamance river and the coastal channels are bordered up to tidal limits by thick mangrove-woodland. Behind this there are often marshy clearings, now
[241] frequently transformed into rice-fields, and stretches of forest communities. Swamp-forests and thickets have screw-pines, palms (*Raphia*, *Calamus*), and bamboos. There are also frequent clumps of oil palm. In the remnants of high forest legumes are abundant and include species of *Afzelia*, *Dialium*, *Daniellia*, *Erythrophloeum*, *Pentaclethra*, *Parkia*, and *Acacia*. Noteworthy trees of the forest patches are a dragon's tree (*Dracaena*), the pattern wood (*Alstonia congensis*), the African teak (*Chlorophora excelsa*), and the silk-cotton tree (*Ceiba pentandra*). Many of them have a height of more than 60 feet.

7. HISTORY

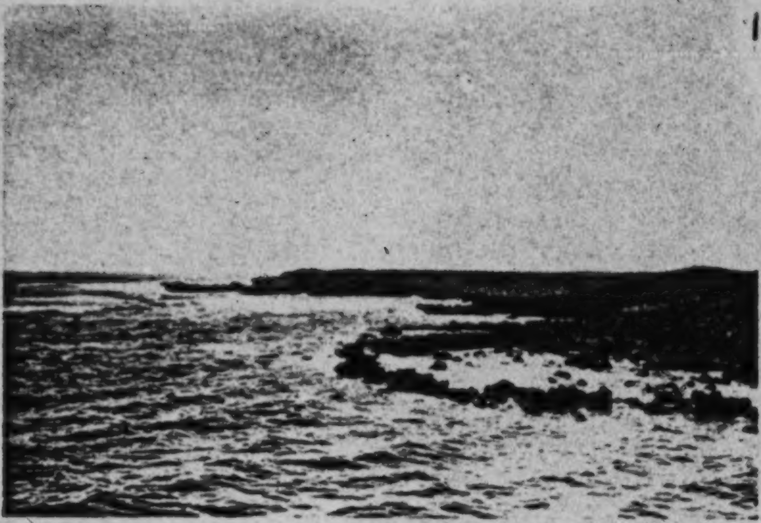
SENEGAL is the oldest French colony in Africa. From it the Niger 175
basin has been penetrated and the Sudan conquered. On it has been based the modern Federation. For more than two centuries, therefore, its history was that of French West Africa as a whole, and it is not until the close of the Napoleonic era that the domestic history of the colony becomes distinguishable.

The Early Nineteenth Century

The Peace of Paris restored the colonial *status quo* of 1 January 175
1792, but St. Louis was not returned to the French until 1817. The 648
British occupation of Senegal had been purely military, with no attempt to introduce British civil administration. French officials had continued their duties, and, when they had died, had been succeeded by other Frenchmen. The resumption of French rule after the war, therefore, presented no difficulties. The country was fairly well known, and explorers used St. Louis more as a starting-point for distant journeys than to make new discoveries in Senegal itself. The British expedition of 1816 under Peddie and Campbell and the French one of 1818 under Mollien added considerably to European knowledge of Fouta, Ferlo, and Bondou, although their main objects were to penetrate Fouta Jalon.

Attempts at European Colonization. In 1815 France agreed to the 175
abolition of the slave trade, although the law embodying this decision 167
was not passed for another three years. As the trade had previously [439]
been the key to the prosperity of Senegal, a new economy had to [567]
be devised. Experiments were consequently made with European settlers, who were to produce cotton and other tropical products. To execute these schemes, Louis XVIII appointed as first post-war Governor Colonel Schmaltz, who had lived for a number of years in the Dutch East Indies. Tragedy attended his voyage out. The ship carrying him, the *Méduse*, was wrecked in Arguin bay on 2 July 1816. The Governor and his wife were saved, but there were many deaths from drowning; and hunger, thirst, and exposure killed many who reached the shore. Out of one party of seventeen only three survived. Another party of 152 persons, including women and children, crowded on to one raft. Many were washed off by waves, many went mad, and many died of thirst. After thirteen days of horror, fifteen survivors were picked up, five of whom died before

133



110. *Almadi point*

137

111. *A baobab tree*

[facing p. 416]

175 reaching St. Louis. This disaster has been made famous by the
167 celebrated painting of Théodore Géricault.

[648] As St. Louis was in British hands until the early months of 1817,
Schmaltz established his capital at Cape Verde.

The first settlers from France were sponsored by the Société Coloniale Philanthropique, and consisted of 175 men, 20 women, and 10 children. Their intention was to settle in the Cape Verde peninsula. This was against the advice of Schmaltz, who thought that part of the country unsuitable. The settlers landed at Goree in April 1817, shortly afterwards crossing to the mainland; but, owing to the attitude of the natives, they were unable to obtain land or labour. At the end of two months there were only six left on the peninsula: the remainder had been repatriated to France or had retired to St. Louis, Goree, or the Gambia. Schmaltz was able to prevent the philanthropic but misguided society from sending eighty more colonists to the same place.

W
Attempts to establish European colonists met with more success on
[175] the Senegal. In 1819 Schmaltz had no difficulty in obtaining from the
[648] chiefs of Oualo all the land he wanted on the left bank of the river.
S
In return, the chiefs were given annual subsidies (*coutumes*) amount-
[648] ing to some 10,000 francs. This arrangement was to lead to endless
[241] trouble. Cotton, coffee, indigo, and tobacco were to be the principal
crops, and colonists were not lacking.

T
The natives of Oualo were peaceable, but the Trarza and Brakna
[175] Arabs, who claimed to be suzerains over Oualo, were hostile. At first
[648] they raided the colonists, but later they were defeated by troops from
St. Louis in a number of skirmishes. Eventually the French recog-
nized nominal Arab suzerainty, and the colonists were allowed to
S
develop their holdings in relative quiet. Nevertheless, the Trarza
[648] Arabs continued to give trouble until 1835, when, after a series of
defeats, they entered into a treaty by which they abandoned all
S
claims to Oualo. The French armed post of Dagana was built for
[712] the protection of the settlers, and an experimental station was started
at Richard Toll for their instruction. The French Government
S
[654] supplied seeds and implements and paid a bonus on crops, and
some forty European plantations were established. At first they
[241] seemed to succeed, but the climate, the labour difficulties, and
the hostile attitude of the natives combined against them. In
1830 the home government withdrew its subsidy, and the planta-
tions were soon abandoned. Since that date the French, while not
discouraging European enterprise, have relied for agricultural
development principally on the native farmer.

22:Winterbotham et al. K-4 (no date) 1944 MS37 Senegal MS37

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112. Goree

[facing p. 417]

22:Winterbotham et al. K-4 (no date) 1944 MS37 Senegal MS37
Mali MS35

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development principally on the native farmer. Trade, not agriculture, took the French farther up the river. In 1820 the post of Bakel was founded, and, under the auspices of Governor Roger, the Société de Galam established stations at Medine, at Mahina, and on the Falémé. The foundation of the company marked a partial return to the monopolistic policy of the previous century. Trade on the upper Senegal was reserved to the company from 1 January to 1 August each year. This caused much dissatisfaction, and the restriction disappeared with the winding-up of the company in 1840.

Like Brue, his predecessor of 120 years before, Roger explored Bambouk for its mineral wealth, but decided that the soundest method of developing Senegal was to expand its trade and agriculture.

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The Gum Trade. After the attempts at European colonization had failed, there developed in the gum trade a boom which reached its maximum in 1838. It will be remembered that, by the Peace of Paris, Great Britain had retained the exclusive right of carrying on this trade along the coast between Portendick and Arguin bay. Elsewhere the French reserved all this trade for their own nationals. Like other trades of the time, that in gum was carried on under a system of subsidies (*coutumes*) to native chiefs and fixed markets (*escales*). This system has been described above on p. 327, and was extremely lucrative to the Arabs. Moreover, the French Government in its treaties usually undertook to pay a subsidy to the chiefs, partly as ground rent for the posts it might establish in their territory, and partly in consideration of the goodwill and protection they were to afford to French trade.

Even so, the years between 1830 and 1860 saw material French extension and development. The following figures (the first two of which represent imports only) show the growth of trade of Senegal from the days of André Brue to those of Faidherbe.

Year	*Thousands of francs*
1700	700
1786	7,260
1821	2,100
1830	3,000
1837	7,000
1838	17,000
1839	13,600
1840	11,800
1845	23,000
1855	14,500
1863	33,100
1869	35,300

MS 37
Wolof MS 30
Trarza MS 24

S 175 439 [648] From 1836 onwards treaties were made with the chiefs of the Casamance basin, and posts were constructed at Sedhiou, Karaban, and Diembering. These treaties respected Portuguese historic but obsolete rights at Ziguinchor, but effectively guaranteed that the future of the river should be French.

S [567] [422] [464] The abolition of the status of slavery by France in 1848 deprived the French merchants of a cheap supply of labour, which they had rented from the chiefs, and in 1850 a committee was appointed to consider withdrawal from the colony or, as an alternative, the establishment of French authority. It decided in favour of the latter, and the policy of trade treaties came to an end.

The new French policy, to which Napoleon III was pledged, was summed up as 'absolute freedom of commerce with the suppression of the escales; establishment of security, by force if necessary; the substitution of full and entire authority for the system of treaties and subsidies; methodical organization of expansion towards the interior; and concurrently the development of economic institutions'.

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'By Force if Necessary'

175 [643] *Faidherbe.* It was to carry out this policy that Faidherbe was appointed Governor of Senegal in December 1854. He had already had much experience as a soldier and administrator in the colony, and, with a break of eighteen months, he held office till July 1865. His period of office marked a turning-point in the history of Senegal, and he is justly remembered as one of the builders of the modern French Colonial Empire. At first his resources were S [701] pitifully small. He had four companies of marine infantry, a company of native infantry formed on the liberation of the slaves in 1848, sixty spahis, and some detachments of artillery and engineers. His naval strength was on a similar scale. Both were substantially strengthened in the next few years.

T S W 175 648 *The Arabs.* Faidherbe decided to deal with the Trarza Arabs. Notwithstanding the treaty of 1835, they had continued their marauding expeditions across the river, and had re-established a supreme influence over the Ouolofs of Oualo. Early in 1855 the Trarza chief Mohammed el Abib insolently demanded the French evacuation of certain islands near the mouth of the Senegal. Faidherbe marched against him and defeated him near St. Louis on 15 February. On 25 February the Ouolofs were defeated near Ross. The French captured more than 2,000 cattle and burned 20 villages.

MS 37
Wolof MS 30
Trarza MS 24

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After another victory in March at Diagane near Merinaghen, Faidherbe annexed Oualo. He divided it into provinces under chiefs nominated by himself, and set up Fara Penda, who remained faithful, as king. In two years many villages destroyed by the Arabs were rebuilt and the population of Oualo rose from 17,000 to 34,000. Faidherbe, who was loath to use force before persuasion had failed, then offered Mohammed el Abib peace if he would renounce the subsidies. The Arab replied by demanding an increase in payments, the destruction of French forts, the prohibition of armed vessels on the Senegal, and the recall of Faidherbe to France. During the absence of Faidherbe in Oualo, Mohammed el Abib advanced in April 1855 to the gates of St. Louis, from which he was beaten back. This marked the limit of Arab successes. In the following January an engagement near Lake Cayar resulted in the capture of 600 tribesmen, and other skirmishes had similar results. Despairing of bringing the main Arab armies to a pitched battle, Faidherbe determined to subdue them by famine, and set himself to destroy or capture their cattle and supplies. By May 1856 these tactics reduced the Arabs to dire straits, and several tribes submitted. The chief's son Ely fled to Diambour. Faidherbe pursued him, and annexed the province which is now Louga. Mohammed el Abib held on, however, and in 1857 invaded Oualo. He was heavily defeated. At last he sued for peace, and on 20 May 1858 signed a treaty (p. 328). A parallel treaty was concluded with the Brakna Arabs at Podor on 10 June.

Although the commercial provisions of these treaties were revised later, they brought to an end, once and for all, the Arab menace to the peace and development of Senegal.

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In 1859 a similar organization to that of Oualo was set up for Dimar, thus extending the colony as far up the river as Podor.

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Further Penetrations. Faidherbe's dealings with the Arabs and the Ouolofs have been described in some detail, as they illustrate his abilities as a general, a diplomatist, and an administrator. By the same combination of force and diplomacy he, or his successor Pinet-Laprade, brought Fouta, Toro, the whole Ferlo country, Cayor, Sine, Saloum, and the Casamance under effective French control. He thus completed the outline of the modern colony. In 1859 the fanatically Moslem Toucouleur of Fouta, under their Almami, Mahamadu Birane, submitted to a division into three independent states under French protection: Dagana, Fouta, and Toro. In 1862, while Faidherbe was in France, the Almami revolted and tried to re-establish his paramountcy. This revolt was quelled

MS37
Wolof MS30

175 after severe fighting, and in 1863 Fouta and Toro were definitely
S annexed by the French.

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175 *Cayor*. The state of Cayor extended from Cape Verde northward
along the coast nearly to St. Louis, and at the end of the eighteenth
648 century it had obtained independence of the Ouolofs. Goree had
been taken by the French from the Dutch in 1677, and by treaties of
W 1764 and 1765 the Damel of Cayor had ceded the tip of the Cape
[635] Verde peninsula in full sovereignty to France. He had further agreed
to restrain his subjects from pillaging the cargoes of wrecks and from
imprisoning their crews. In return he was to receive an annual
subsidy of 180 bars, one-third in iron and the remainder in merchandise.

These treaties, however, had never been implemented. In 1825
Governor Roger considered them dead, and advised Frenchmen who
wished to acquire land in the peninsula to make their own arrangements
with the native authorities. At the same time, Roger made a
fresh convention regarding wrecks, which was no more observed
S than the earlier treaties. In 1832 land was purchased for a cemetery
W on the mainland and in 1846 a mission of the Society of the Sacred
[799] Heart, which received a government subsidy until 1906, was established at Dakar.

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[162] The population of Goree, some 5,000 persons, needed wood, water,
building materials, and fresh provisions, which they could only purchase
W at extortionate prices on the mainland. All efforts to conclude
[439] agreements with the chiefs on these matters failed, and wreckers'
profits were not to be diminished by scraps of paper. Security was
needed for the projected railway from St. Louis and it was desirable
S to give the priests protection. In 1857, therefore, the French
Government authorized the construction of a fort on the mainland.
[712] Birahima, the reigning Damel of Cayor, at first acquiesced in this
occupation, largely because his authority over the Lebous who
inhabited the peninsula had long been but nominal. The post was
S used by Faidherbe for a base for his operations in 1859. In that year,
[712] after the battle of Fatik (18 May), the tribesmen of Sine, Saloum, and
Baol submitted to French authority, and posts were created at Joal
and Kaolack. Trouble arose under the Damel's successor, Makodou,
who refused to recognize Birahima's agreement to allow a French
road and telegraph line from St. Louis to Goree to be run through
Cayor. A French column from St. Louis under Faidherbe met an
expedition under Pinet-Laprade from Goree and occupied Makodou's
capital, Mekhé, on 12 January 1861. On 1 February he accepted

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French protection. Hardly was Faidherbe's back turned when Makodou repudiated his engagements. A fresh expedition was necessary, and on 12 March Makodou's forces were repulsed again at Diati near Mekhé. Faidherbe thereupon encouraged an internal revolt, which resulted in the flight of Makodou and the recognition of Madiodio as Damel. He in his turn was dethroned by Lat Dior, whom the French also recognized. He also failed to observe his predecessor's treaties, and in 1863 Faidherbe marched against him and re-established Madiodio. In the December of that year Lat Dior gathered his forces and fell upon the French garrison of Goumbo Gueoul, when Captain Lorans and almost all his detachment of 140 tirailleurs were killed. This time there were no half measures: Lat Dior's army was cut to pieces by Pinet-Laprade near Pout on 12 January 1864, but he himself escaped to the Gambia. Faidherbe then suppressed the native kingdom, established a French protectorate, and divided Cayor into cantons, each under a chief of his own appointment.

In 1865 Pinet-Laprade, who had succeeded Faidherbe, had to deal with a mallam named Maba, who threatened to involve in a holy war not only Cayor but also the country as far east as Fouta. In 1869 Lat Dior again invaded Cayor, and in 1871 was again recognized by the French as Damel, though shorn of part of his territory. This arrangement worked well for ten years, and when Ahmadu Checkhou, a mallam of Toro, invaded Cayor, the French could not refuse armed aid to Lat Dior. The former was defeated and killed by French forces at Boumdou near Coki in February 1875. In 1881 Lat Dior once more gave trouble by opposing the construction of a railway, and, after military operations, he was replaced by his nephew. Internal unrest followed for some years and Lat Dior tried to take advantage of it; but on 26 October 1886 he was defeated and killed. The protectorate was finally abolished, and Cayor was annexed to the colony.

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At the close of Faidherbe's term of office in 1865 modern Senegal may be said to have emerged. It would be a mistake to regard him only as a conqueror, for, though his primary object was to impose French authority, Senegal owes to him the foundation of its civil administration, its education, its banking system, and its Survey Department. Sympathetic to the natives, he tried to preserve their institutions to the utmost extent compatible with his primary object. While not prepared to discourage European colonization under suitable conditions, Faidherbe considered that the main agricultural

MS 37
Soninke MS21

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development must be by native farmers guided by French instructors and aided by French capital. In 1861 French colonial trade, which had hitherto been restricted to French merchants and the French flag, was thrown open to all nations, though French goods continued to have a preference. This reform was not well received by the conservative merchants of St. Louis, but there can be no doubt that it rapidly proved of benefit to the colony.

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Mahmadu Lamine. The last challenge to French rule within the boundaries of Senegal arose from a Soninké mallam named Mahmadu Lamine. Having returned from a pilgrimage to Mecca, he set up as a holy man at Medine and proceeded to interfere in the domestic concerns of the natives of Bondou. Rebuffed by their rightful ruler, he installed himself at Sénoudébou early in 1886, proclaimed himself a mahdi and claimed a holy mission to restore the ancient power of the Sarakollé dynasty (Vol. I, p. 168). In March and April he attacked the fort of Bakel, at the head of 12,000 fanatics, but was repulsed. In May Colonel Frey marched out from St. Louis with a strong column which relieved Bakel. Notwithstanding this, Mahmadu again invaded Bondou, where he defeated and killed the king. Then he attacked the French post at Sénoudébou, crossed the Senegal, and endeavoured to cut the French communications between Bakel and Kayes. Galliéni himself, who had been recently appointed to command the troops in Upper Senegal, took the field against him and broke his power in several engagements. The mallam fortified himself at a village 46 miles south-west of Tambacounda. This village was taken by the French on 8 December 1887. Mahmadu escaped; but he was attacked by allies of the French on 9 December, and two days later died of his wounds. All the tribes of the country north of the Gambia boundary then sought French protection. Later disturbances in Senegal had their origin either in internal tribal dissensions or in dislike of closer control by France. In all respects they were minor affairs.

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The Consolidation of French Rule. The original treaties, of which the French negotiated some 130 between 1785 and 1891 with the chiefs of Senegal, dealt with trade only. They fixed the rents and rates payable by each individual trader, and usually gave subsidies to the chiefs in return for their goodwill. These treaties did not attempt to deal with the internal administration of the tribes or with their foreign relations. The next stage was a treaty of friendship and protection, in which the native state was free to conduct its own affairs, subject only to the general guidance of French Residents.

At this stage no French taxation was imposed. Faidherbe was the first 175 to insist that the election of any chiefs must be subject to his approval, 648 and from this time onwards the French hold gradually grew tighter. As the French historian Sabatié has put it:

> 'These treaties guaranteed the political organization, the religion, customs, institutions, and laws of the native country concerned. They were designed to ensure the security of our commerce and respect for the property of our nationals and our subjects, and they stipulated, by way of compensation, the collection of certain taxes on cattle and exported products for the benefit of chiefs. As a result of the evolution of the colony and its economic and administrative necessities, the clauses and obligations of these treaties have lapsed.'

The system lasted until towards the end of the nineteenth century; but from that time onwards native powers, especially over judicial matters, land, and tribute, have been gradually curtailed. Native chiefs have become agents appointed by the Government, and native administrative institutions have almost everywhere been deliberately abolished. This policy has its roots not only in administrative convenience but also in a strong sense of duty to the individual native and a desire to protect him from misrule.

The Modern Constitution

Until 1920 the four communes of Dakar, Goree, Rufisque, and 631 St. Louis were described as the territory under direct administration, 633 the remainder of the colony as a protectorate. In that year the distinction, which had long been one without a difference, was formally abolished.

Senegal, being the oldest colony, contains about a quarter of the 641 whole European population of French West Africa. It also contains a larger proportion of educated and politically minded natives than [162] the other colonies, and its constitution is more democratic. This last fact is mainly due to the equalitarian doctrines of the July Monarchy at the time when the personal status of Senegalese native citizens and their rights as Frenchmen were determined. In 1833 the French Parliament enacted that any person born free, or having legally acquired his liberty, enjoyed in the French colonies both civil and [648] political rights under conditions prescribed by law. In 1848, therefore, when the colony first acquired the right to send a deputy to the French Parliament, natives born in the French settlements of Goree, Rufisque, and St. Louis, the only French soil in Senegal at [633] the time, became entitled to the Parliamentary vote and to all the

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641 other privileges of French citizenship. In due course the same
[633] status was conferred on natives of Dakar, and in 1916 French
citizenship was extended not only to natives born in these four
communes but to their descendants also. It thus came about that out
[162] of 80,500 native citizens in the whole of French West Africa 78,000
live in Senegal or Dakar. Of these the great bulk resides in the four
old communes.

633 Municipal government, on entirely metropolitan lines, was
conferred upon St. Louis and Goree in 1872 and upon Rufisque in
1880. In 1887 Dakar, which had hitherto formed part of Goree, was
separated from it, receiving its own elected mayor and council, and
in 1929 absorbed its parent. The District of Dakar was separated
from Senegal in 1924, and received its own Administrator, directly
responsible to the Governor-General.

646 Parliamentary representation was suspended under Napoleon III,
but restored in 1870. Until 1914 a European had been elected, but
the racial issue was deliberately raised in that year, when M. Blaise
[645] Diagne, a Sérère, entered on his long term as Deputy for Senegal. He
thoroughly justified his race by heading a campaign for voluntary
recruitment in Senegal during the War of 1914–1918, and subsequently
held office as Under-Secretary of State for the Colonies.
As early as 1879 the General Council was elected by the citizens of
[633] the four communes. It had certain powers of taxation and legislation
over the four communes, powers which, though limited, were more
democratic than in other parts of French West Africa. Its greatest
influence, however, lay in the criticism of the Government, a
function which, withheld from it by law, sprang naturally from the
power of taxation. When the formal distinction between colony and
protectorate disappeared, the General Council gave place to the
existing Colonial Council (p. 432), a body with generally similar
powers extending over the whole colony.

648 *Senegal and Federation.* Before 1845 and again from 1859 to 1893
[643] the whole of what is now French West Africa was administered by
the Governor of Senegal. It was natural, therefore, that in 1895 he
should be appointed Governor-General of the Federation, with its
not very precise constitution. This appointment was welcomed in
Senegal, as it enhanced the colony's supremacy. In 1902 the Governor-Generalship
was made a separate office, and Senegal sank to the
level of the other colonies. This new arrangement, although a blow
[652] to the pride of the Senegalese, did not touch their pockets. They still
kept control of their own revenues, out of which they voted a sum

to the Federal Government. In 1904, however, when the distinct 648 Federal budget was instituted, custom duties were lost to the various 652 colonies. The General Council of Senegal protested vigorously. [651] Its spokesmen said that the Federal Government had taken away 78 per cent. of the colony's revenue and only assumed 39 per cent. of its expenditure. So strongly did the Council feel on the question that it impugned the validity of the federal financial arrangements before the Council of State at Paris. This latter body, as was to be expected, confirmed them in 1908, but the Senegalese have never fully accepted the new system. In 1929, for example, it was stated that Senegal was contributing half the customs revenue of French [651] West Africa, though containing only one-tenth of its population. Moreover, despite its democratic Colonial Council, the colony has no more direct influence in federal affairs than Mauritania. Even to-day protests are still heard periodically against the financial system of the Federation and its alleged encroachments on the sphere of the Colonial Government.

Christianity

The first definite record of a Christian mission is that of the 797 French Capuchins, who sailed from Dieppe in 1635. They divided into two parties: one, under Pères Alexis and Bernardin, landed at Rufisque, where they were entertained by Portuguese Christians. During their stay they baptized 27 natives. The other party landed at St. Louis, where there was not yet a permanent French settlement, and met with misfortune. Some of them died, and the survivors joined their brothers at Rufisque. The Protestant Dutch made life impossible for them, and the whole party returned to France. Though from time to time priests of the Society of the Holy Spirit (founded in 1726 to train missionaries for the French colonies) visited Senegal, no serious missionary effort seems to have been made till after the Peace of Paris, when the first Prefect Apostolic was appointed to St. Louis.

The first nuns to work in Senegal were of the community of St. Joseph of Cluny. These were sent out in 1819 to St. Louis at the request of the Governor to undertake nursing and education. The community established two schools in St. Louis and one in Goree in [871] 1826.

In 1846 the first mission was founded at Dakar, which the same year became the seat of the Vicar Apostolic of the Two Guineas. These missionaries belonged to the Society of the Sacred Heart

MS37
Wolof MS30

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797 with which the Society of the Holy Spirit was united in 1848. About the same time a house of the Sisters of the Immaculate Conception (the Blue Sisters) was established at Dakar, which has been the Roman Catholic metropolis of French West Africa ever since.

In 1906, on the separation of Church and State in France, the government subsidies to the Roman Catholic missions were with-
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[162] drawn. In 1930 the Roman Catholics in Senegal had 67 European priests, sisters, and lay workers aided by 175 native catechists and
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[368] teachers. Professing Roman Catholics numbered 22,300. A magnificent cathedral, the work of many years, was consecrated at Dakar in 1936.

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[162] The only Protestant mission in Senegal is that of the Société des Missions Évangéliques de Paris, which began work in the colony in 1863. Its adherents number about a hundred.

8. DISTRIBUTION OF POPULATION AND INLAND TOWNS

Distribution of Population

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Senegal

161 SENEGAL is the third most densely populated colony, with an average of 21·58 persons per square mile and a total population in 1937 of 1,666,374. The distribution, however, varies greatly within the colony itself. The regions of Fouta and Ferlo are almost uninhabitable, while the provinces of Baol, Sine-Saloum, and Thiès have more than 50 persons per square mile. The coastal provinces of Bignona and Ziguinchor, south of the Gambia, are equally closely
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[361] settled. The left bank of the Senegal, roughly from Bakel to Podor, supports a fairly dense agricultural population.

Growth has been steady, the figures for 1921, 1926, and 1931 being 1,225,523, 1,318,287, and 1,584,273 respectively. There is no doubt that the colony is capable of supporting many more inhabitants than it does at present.

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[701] *Natives.* More than 580,000 Ouolofs live in Senegal. These are among the most energetic and intelligent peoples of the Federation, and they provide the bulk of the famous Senegalese Tirailleurs. There are about 250,000 each of Sérères, Mandingos, and Fulani, and 150,000 Toucouleur. Broadly speaking, the Ouolofs live north and east of Dakar, the Sérères south-east thereof, the Toucouleur

22:Winterbotham et al. K-4 (no date) 1944 MS37 Senegal MS 37

near the Senegal river, the Fulani in the centre of the colony, and the Mandingos in the east of it. 162 [563]

The District of Dakar

The 66 square miles of the District of Dakar contain 126,929 persons; but the figures for density per square mile mean even less than elsewhere, since most of the inhabitants live in the town itself.

In 1937 there were 118,459 natives and 8,470 Europeans, of whom 6,728 were French. This was about a quarter of the total of Europeans [563] in the whole Federation.

INLAND TOWNS

BAKEL (14° 52′; 12° 24′ W.) Population, 2,103. Provincial head- 36 quarters. Medical post. Landing-ground. Regional School. [131] Garage. Daily market. [162]

Bakel is on the left bank of the Senegal (Plate 83) where the river passes between cliffs some 17 miles below the entrance of the Falémé. It is a local market for gum, ground-nuts, grain, gold [438] dust, hides, and ostrich feathers. Most of the inhabitants are Moslems. [162]

By river it is 531 miles from St. Louis and 84 miles from Kayes, [487] and there is a fortnightly steamer service when the water permits. [505] By colonial road Bakel is 386 miles from St. Louis, 93 miles from [491] Matam, and 32 miles from Kidira. A bus service connects all these places. The river can be crossed by ferry, and from the Mauritanian [494] bank a poor track leads to Sélibaby (32 miles).

BAMBEY (14° 40′; 16° 25′ W.). Altitude, 59 feet. Population, [131] 4,209. Mixed Commune. Dispensary. Police station. Meteoro- [162] logical station. Landing-ground. Garage. Agricultural experi- [654] mental station. Daily market.

Set in the midst of an area of dense population, Bambey is a prosperous market town. The main product of the locality is [438] ground-nuts, and large quantities of these are put on the train each year. They also form the chief speciality of the agricultural experi- [654] mental station.

Communications. By railway Bambey is 77 miles from Dakar, 33½ miles from Thiès, 17 miles from Diourbel, and 319 miles from Kidira. It is on the intercolonial road, being 49 miles from Thiès [491] and 16 miles from Diourbel. A colonial road goes almost due south to Fatik (27 miles). There is a daily bus service (p. 473) to Fatik, [494] Foundiougne, and Kaolack.

22:Winterbotham et al. K-4 (no date) 1944 MS37 Senegal MS37

36 **Bignona** (12° 49′; 16° 16′ W.). Altitude, c. 60 feet. Population, 1,611.
[131] Provincial headquarters. Medical post. Military post. Emergency
[162] landing-ground. Garage.

Bignona stands on the left bank of a small and marshy tributary of
the Casamance. Canoes carry a certain amount of merchandise, as
[438] also do lorries. The principal items of trade are ground-nuts, palm
kernels, wax, rice, and fruit. Most of the native inhabitants are
[162] Dioulas.

Colonial roads lead south to the Casamance opposite Ziguinchor
[491] (16 miles), east to Sedhiou (58 miles) and Kolda (120 miles), and
north-west to Diouloulou (35 miles) and the frontier of the Gambia
(46 miles). There are also several minor roads and tracks.

[131] **Dagana** (16° 27′; 15° 34′ W.). Altitude, 13 feet. Population,
[162] c. 3,500. District headquarters. Medical post. Emergency
landing-ground. Regional School. Race-course.

[439] Dagana is on the left bank of the Senegal, and its chief economic
function is as a market for Mauritanian gum. This is shipped down
[487] river to St. Louis, 116 miles away. There is also connexion upstream
to Podor (61 miles), Bakel (403 miles), and Kayes (487 miles).

By colonial road Dagana is 86 miles from St. Louis and 332 miles
[491] from Kidira. It is on the bus service (p. 474) between these two
[494] places. Southwards another colonial road leads across sparsely
inhabited country to Dahra (89 miles) and Diourbel (162 miles).
From the opposite bank of the Senegal a track goes to Mederdra,
some 30 miles distant.

[131] **Diourbel** (14° 39′; 16° 10′ W.). Altitude, 39 feet. Population,
[162] 15,442. Mixed Commune. Provincial headquarters. Medical
post. Police headquarters. Emergency landing-ground. Power
station. Hotel. Garage. Daily market.

This flourishing town lies across the little Sine river in the middle
of a well-cultivated shallow valley. To the north the ground rises
[438] somewhat. Diourbel owes its prosperity to ground-nuts, and
100,000 tons of them pass through the town every year. There are
[258] several factories for the shelling of the nuts and for the expression
of their oil. Besides this, Diourbel is the headquarters of the province
[162] of Baol and a route centre. Its inhabitants are mainly Moslems, who
[871] have a large and important mosque. There is also a special school for
sons of chiefs.

The electric power station h[illegible] a gas-engine plant that burns the residue from ground-nut presse[illegible] 36 [377]

Communications. Diourbel is the railway junction for Routes 3 and 4. By the former it is 50½ miles from Thiès and 302 miles from Kidira, [496] and by the latter it is 31 miles from Touba. The intercolonial road [491] leads westwards to Thiès (65 miles) and Dakar (109 miles) and south-eastwards to Kaolack (40 miles), Tambacounda (230 miles), and Nayes (351 miles). Colonial roads go north-eastwards to Dahra (73 miles) and Dagana (162 miles) and south-westwards to Fatik (25 miles) and Kaolack (53 miles).

LOUGA (15° 37′; 16° 16′ W.). Altitude, 128 feet. Population, [131] 4,390. Mixed Commune. Provincial headquarters. Medical [162] post. Barracks. Police headquarters. Landing-ground. Regional School. Power station. Garage. Race-course. Agricultural [654] experimental station and farm school. Daily market.

Louga is the scene of the most important cattle market in the whole [438] colony. It is this that has made it a route centre. Other local products are ground-nuts, gum, and millet. Administratively, Louga is the headquarters of the province of the same name and also a military headquarters.

Electricity is supplied by an oil-driven plant. [377]

Communications. Louga stands at the junction of railway routes 1 and 2, being 119 miles from Dakar, 44 miles from St. Louis, and [496] 81 miles from Linguéré. It is on the intercolonial road from Dakar (121 miles) to St. Louis (47 miles). A colonial road runs eastwards [491] across the colony to Dahra (59 miles), Linguéré (84 miles), and Matam (242 miles). There are also minor roads and tracks.

PODOR (16° 35′; 15° 02′ W.). Population, 3,168. Provincial head- [131] quarters. Medical post. Emergency landing-ground. Regional [162] School. Garage. Daily market.

This riverside town is chiefly important for gum arabic. The gum [439] is brought by the Arabs, sold in the market, and shipped down the Senegal to St. Louis.

Communications. By river Podor is 178 miles from St. Louis and 437 miles from Kayes. Throughout the year the Messageries [487] Africaines run a fortnightly service to and from St. Louis. From [505] July to January the boats also go upstream as far as Matam (234 miles) and in August and September to Kayes. Podor is on the colonial road, being 135 miles from St. Louis and 288 miles from Nayes. There is a [491] ferry across the river to connect with tracks to such Mauritanian

36 towns as Boutilimit and Aleg. There is also a track that runs south-
[491] south-westwards to Yang-Yang. For half the year there is a bus
service twice a week to St. Louis in one direction and to Kidira in
[494] the other.[1]

[131] **Tambacounda** (13° 45'; 13° 39' W.). Altitude, 148 feet. Population,
[162] c. 4,000. Provincial headquarters. Medical post. Police head-
quarters. Landing-ground. Wireless station. Hotel. Garage.

On a slight eminence above a marshy tributary of the Sandougou,
[491] Tambacounda is of considerable importance as a route centre. It
[496] is not only a road junction but also the most southerly point in
Senegal of the Dakar–Niger railway. Near the town is a sisal
[248] plantation.

The hotel is open only from December to May.

[496] By rail Tambacounda is 285 miles from Dakar, 111 miles from
Kidira, and 170½ miles from Kayes. One intercolonial road runs
[491] westwards to Kaolack (188 miles), Thiès (295 miles), and Dakar
(339 miles); another north-eastwards to Nayes (121 miles) and
Kayes (176 miles); and a third southwards to Diabougou (25 miles)
and ultimately to Labé (288 miles). Before the war Tambacounda was
[509] connected to Dakar and Bamako by a weekly air service operated by
Air France.

[131] **Thiès** (14° 49'; 16° 52' W.). Altitude, 207 feet. Population, 15,451.
[162] Mixed Commune. Provincial headquarters. Medical post.
Barracks. Police headquarters. Landing-ground. Regional School.
[797] Roman Catholic mission. Power station. Hotels. Garages.
Railway workshops. Cinemas. Daily market.

Since the opening of the railway in 1885 Thiès has grown from a
collection of native huts to a large town. The railway workshops
[498] employ many hundreds of men, and the market handles considerable
[438] quantities of ground-nuts. The town has been built on a slope that
declines gently east and north-east to a small stream. The old Fort
Faidherbe is still standing, and there is a big Roman Catholic church.

Communications. Thiès is a railway junction, being 43½ miles
[496] from Dakar, 119½ miles from St. Louis, and 352½ miles from Kidira.
[491] It is also a meeting-place of intercolonial roads. One of these comes
from Dakar (44 miles) and goes on to St. Louis (124 miles), while the
other branches east to Kaolack (107 miles), Nayes (416 miles), and
Kayes (471 miles). There are several minor roads, notably one going
[494] south to M'Bour. Along this road there is a regular bus service, with
two buses each weekday in either direction.

[1] [From The Town of Podor--Analyst]

9. ADMINISTRATION

DAKAR, the capital of the Federation and the residence of the Governor-General, is geographically in Senegal, and from its foundation in 1863 it was administered by the Governor of Senegal as part of that colony. By the decrees of 25 October and 27 November 1924, however, the District of Dakar was, without prejudice to its municipal institutions, made a separate administrative unit, under an Administrator directly responsible to the Governor-General. Only Dakar and Goree were originally included, with an area of 60 square miles, but the Commune of Rufisque was added by a decree of 9 June 1937. The District now has a population of 127,000, and it has its own budget. 633 [648] [162]

Senegal returns a deputy to the French Chamber of Deputies, who is elected by French citizens (European or native) resident in the colony and in Dakar. The deputy is *ex officio* Senegal's representative on the Supreme Council of the French Colonial Empire. 648

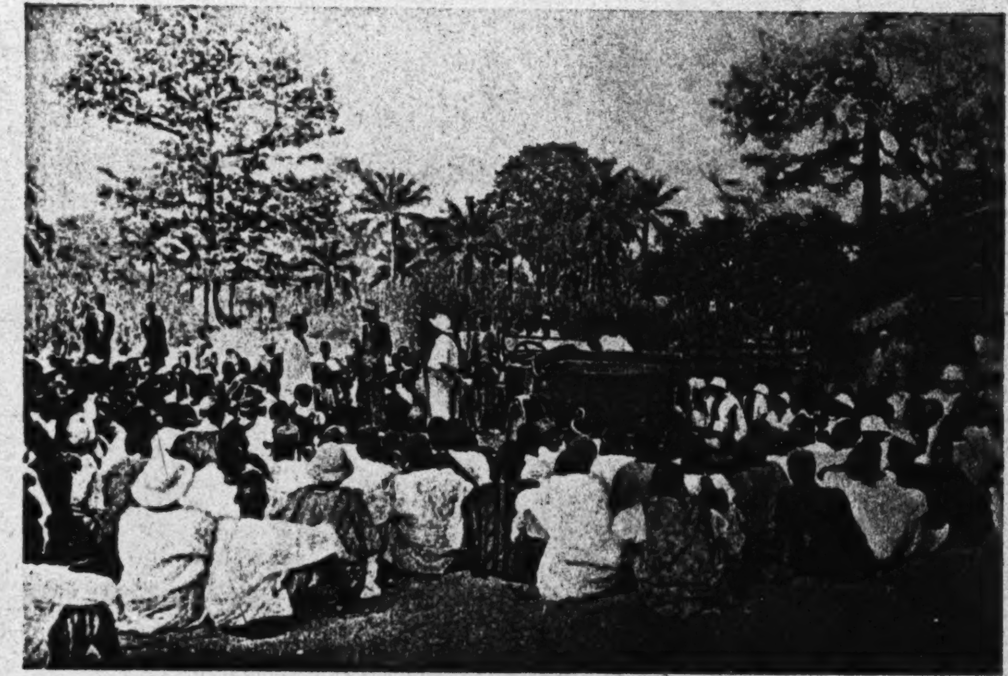
Councils

Executive Councils. The Executive Council of Senegal is composed of the Governor, the Secretary-General, the Attorney-General, the officer commanding the troops, one French citizen elected by the Chamber of Commerce of St. Louis, and one citizen and two subjects nominated for two years by the Governor-General. 645 [648]

It is a purely advisory body, but the Governor is bound to consult it on such matters as the Colonial Budget, proposed changes in taxation, disposal of government property, and concessions. He may indeed, require its advice on any matter he chooses.

The Executive Council for the District of Dakar was at one time composed of the Standing Committee of the Governor-General's Council together with the Administrator. This arrangement, legalized in 1924, was changed by a decree of the 9 June 1937 which gave Dakar its own Executive Council, composed of the Administrator, Deputy-Administrator, the officer commanding the troops at Dakar, the Attorney-General, one member of the Chamber of Commerce appointed by that body, two municipal councillors of Dakar and one of Rufisque appointed by their respective councils, and one French subject appointed by the Governor-General. 633 [648] [648]

[facing p. 432]



113. *Senegal: a Council of Notables*

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633 The Council has the same functions as that of the colony, but its
645 decisions need the approval (usually formal) of the Standing
[648] Committee of the Governor-General's Council.

The Executive Councils of Senegal and of Dakar are known as *conseils privés*, whereas those of the other colonies are known as *conseils d'administration*.

646 *The Colonial Council of Senegal.* The history of the Colonial
633 Council and of its predecessor, the General Council, has been given
above. The earlier council had jurisdiction over the four full
communes only, but its successor, which dates from 1920, when all
distinctions between colony and protectorate were abolished, has
jurisdiction over the whole colony. The inhabitants of the District
of Dakar still retain their votes for the Colonial Council, and as a
corollary the Council can discuss the affairs of the District. The
pretext for this decision was afforded by the provision, in the decrees
[C52] of 1924, that the Colonial Budget of Senegal should contain a grant
in aid of Dakar; but French writers do not disguise the fact that it
was thought not desirable entirely to divorce the District from the
rest of Senegal. The decrees of 1924, therefore, expressly left it an
integral, though autonomous, part.

646 The Colonial Council is unique in French Africa in that its
666 membership includes Europeans, natives, chiefs, citizens, and subjects. It is, therefore, worthy of detailed mention. Its constitution
[642] and powers are laid down in a decree of 4 December 1920, as amended
by decrees of 30 March 1925, 13 January 1930, and 8 April 1939.
This last added the subjects. The colony is divided into four electoral
districts, from which members are elected on a population basis.
The Council is elected for a term of six years, but, on the recom-
[648] mendation of the Governor, it may be dissolved by the Governor-General. Should a dissolution occur, a new election must be held
within three months. There are 62 members in all: 26 citizens
elected by citizens, 18 provincial or canton chiefs elected by those of
the same rank, and 18 native subjects. These subjects must either
have been born in the colony or be descendants of subjects born in
[641] the colony; they must have completed their military service; and
they are elected by all other subjects who fulfil the same conditions.
In 1929 the European element only numbered one-fifth of the total
membership, and the additions made in 1939 will have had the
effect of swamping it.

646 The Council meets for a fortnight's session once a year, but it can
643 be summoned by the Governor at any time. It chooses its own

22: Winterbotham et al. K-4 (no date) 1944 MS37 Senegal MS37

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114. *St. Louis*

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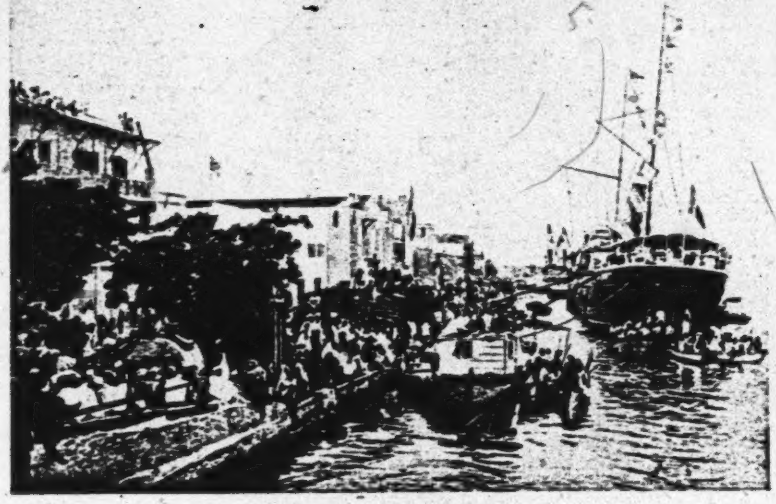

115. *St. Louis: the North Quay*

[facing p. 433]

president, but the Governor has the right of addressing it and of 646
deputing high officials to speak to it of the work of their own depart- [643]
ments. It appoints a Standing Committee, which can meet to trans-

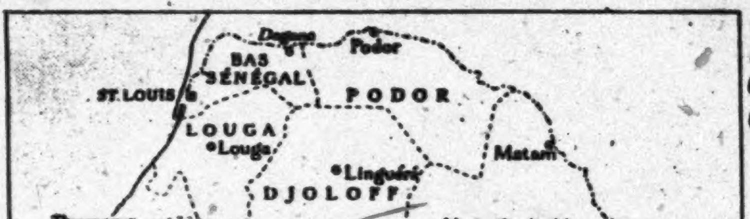
Dagana
BAS SÉNÉGAL
Podor
PODOR
ST. LOUIS
LOUGA
Louga
Linguère
DJOLOFF
Matam
MATAM
Bakel
Tivaouane
Thiès
Rufisque
THIÈS
Diourbel
BAOL
M'Bour
Fatik
SINE-SALOUM
Kaolack
Kaffrine
Foundiougne
TAMBACOUNDA
Tambacounda
BAKEL
KOLDA
Kolda
SEDHIOU
Sedhiou
HAUTE GAMBIE
Kédougou
Diembéring
Bignona
BIGNONA
Oussouye
Ziguinchor
ZIGUINCHOR
International Boundary
Intercolonial "
Provincial "
Colonial Capital
ST LOUIS
Provincial Headquarters
Diourbel
District "
Kaffrine
Miles 50 0 50 100 150 200 Miles

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FIG. 52. *Senegal: Administrative Divisions*

act business when the full Council is not in session. It is bound, 646
however, to report to its parent body.

The Council's powers are wide. It must be consulted on a proposal
to create new communes, and it may advise on any matter put before [643]
it by the Governor. It may legislate on eight stated topics, which are
chiefly concerned with the management of state property and with [652]
the colony's financial contributions to the public works of the
Federation. This legislation comes into force within two months, [648]
unless previously vetoed by the Governor-General. The Council
also has the right to deliberate the assessment and collection of [652]

133

116. *Dakar: Bernard bay*

[facing p. 434]

646 [648] [652] taxes and all items of the Colonial Budget not fixed by the Governor-General.

Article 40 of the decree of 1920 forbade any deliberation of political [642] matters and any resolution concerning them. The power to discuss the budget, however, has nullified this prohibition, and criticism of the Government plays a considerable part in the Council's debates. [631] The citizens are usually more independent than the chiefs, since the latter owe their appointments to the Governor. It is too early to judge the effect of the recent addition of subjects.

It will be clear from the foregoing that this Colonial Council [642] performs a very useful function. Although it cannot bring the machinery of government to a standstill, it can seriously hamper the administration. In consequence Senegal has a greater tincture of democracy than any other colony.

Territorial Divisions

635 634 The colony is divided into fifteen provinces (Fig. 52), some of them subdivided into districts. Their names and the names of their headquarters towns are as follows.

Province	*Headquarters*	*Area in square miles*	*District headquarters*
Bakel	Bakel	8,755	..
Baol	Diourbel	1,714	..
Bas Sénégal	St. Louis	2,351	Dagana
Bignona	Bignona	1,699	Diouloulou
Djoloff	Linguéré	6,275	..
Haute Gambie	Kédougou	5,212	..
Kolda	Kolda	5,599	..
Louga	Louga	3,886	..
Matam	Matam	10,116	..
Podor	Podor	4,857	..
Sedhiou	Sedhiou	2,703	..
Sine-Saloum	Kaolack	10,228	Fatik, Foundiougne, Kaffrine
Tambacounda	Tambacounda	9,998	..
Thiès	Thiès	2,707	M'Bour, Tivaouine
Ziguinchor	Ziguinchor	1,120	Oussouye

635 The four provinces of Bignona, Kolda, Sedhiou, and Ziguinchor are grouped together as the Casamance Territory, at the head of which is a Session Administrator, or Chief Commissioner, residing at Ziguinchor.

In almost all provinces the provincial Commissioner is assisted by a Council of Notables (Plate 113).

[facing p. 135]

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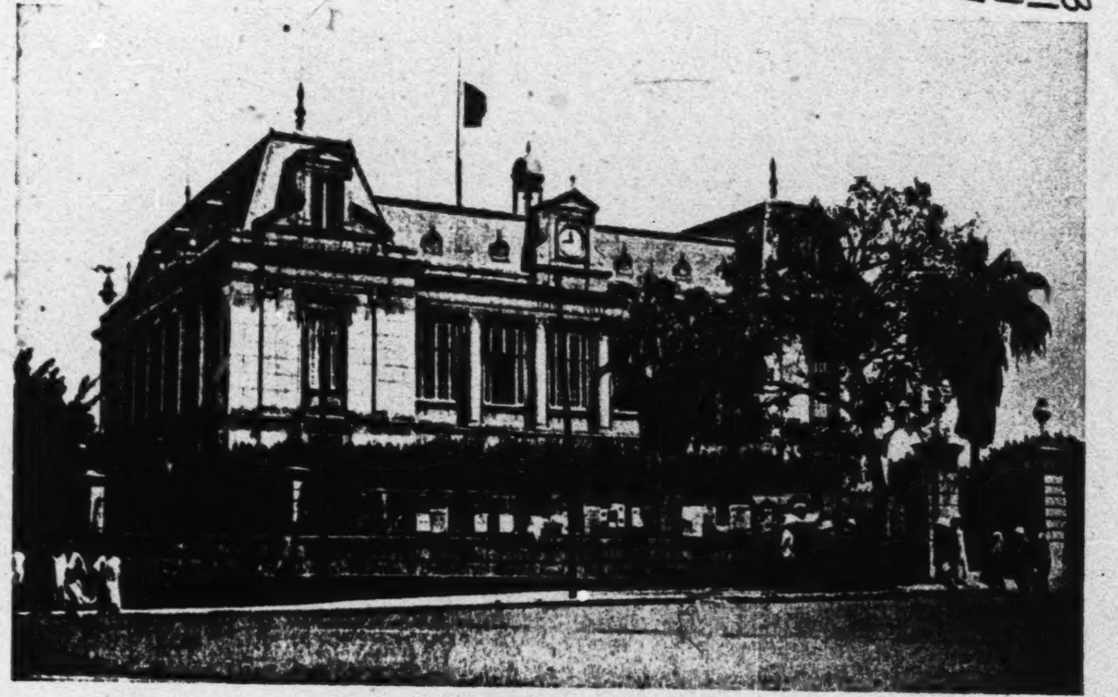

117. *Dakar: the Mairie*

22 Winterbotham et al. X-4 (no date) 1944 MS37 Senegal MS 37

Municipal Government

633 *Full Communes.* Dakar (including Goree), St. Louis, and Rufisque are full communes (Vol. I, p. 258), the only ones in the Federation.

The Municipal Councils, which choose their own mayors, consist of from fifteen to eighteen members. These are elected for terms of four years by the French citizens of their towns, and since 1910 all the councils have had African majorities. At first these communes had powers as extensive as their counterparts in France, and they were responsible for police, public health, roads, markets, lighting, and elementary education. In 1918, however, the colonial authorities took over public health at St. Louis and at Dakar, and in 1927 at Rufisque. Similarly, in 1924, the creation of the District of Dakar was made the occasion to subtract police and roads from the commune. The same process, without the same excuse, went on in 1927 for St. Louis and for Rufisque. For all these services the municipalities still make financial contributions.

Their revenue comes from direct government grants, from 652
municipal rates, and from municipal undertakings. Altogether they 651
include market dues, liquor licences, lighting, and a proportion of the 633
business licences and other colonial taxes. In normal years the revenue of Dakar averaged some 8,000,000 francs, of St. Louis 7,750,000 francs, and of Rufisque 5,600,000 francs.

In each case the budget is drawn up by the mayor, passed by his council, and submitted to the Governor or Administrator. [643]

633 *Mixed Communes.* There are fifteen mixed communes in Senegal, namely Bambey, Bargny-Gouddou, Diourbel, Fatik, Foundiougne, Gossas, Kaolack, Kébémer, Kombole, Louga, M'Bour, Mekhé, Thiès, Tivaouane, and Ziguinchor. Thirteen of them are mixed communes of the first degree, but since 1925 Kaolack and Ziguinchor have been mixed communes of the second degree.

Chambers of Commerce. There are Chambers of Commerce at 441
Dakar, Kaolack, St. Louis, Thiès, and Ziguinchor. The one at 647
St. Louis is the successor of a Committee of Commerce which was set up in 1825. The Chamber at Thiès is also known as the Chamber of Cayor-Baol. It was first founded at Rufisque in 1883, but in 1937, when that town was included in the District of Dakar, it was moved to its present headquarters.

In Senegal there are no separate Chambers of Agriculture and Industry, but the Chamber of Commerce at Dakar has a section, established in 1930, devoted to those two activities.

Courts of Law

692 The Court of Assize sits at Dakar, and the Tribunals of First Instance sit at Dakar, Kaolack, and St. Louis. There is a Magistrate's Court at Ziguinchor, and there are Moslem Courts at Dakar, Rufisque, and St. Louis. In each province and full commune there are the usual native courts, and the Colonial Court of Appeal for Senegal sits at St. Louis. There is a separate one for the District of Dakar.

In addition to the local courts, the West African Court of Appeal and the Supreme Native Court of Appeal are both held at Dakar.

Native Organization

631 177 All the old chiefdoms and kingdoms have now disappeared. On the other hand, owing to their representation on the Colonial Council, chiefs in Senegal to-day exercise greater influence than in other colonies. They are appointed and paid by the Government, and they can usually be relied on to supply an official majority. In 1925 they induced the Government to raise their salaries, which now range from 7,600 francs to 36,500 francs per annum. The chiefs are divided into no less than twelve grades. Most of them have [871] been educated at the École des Fils des Chefs et des Interprêtes at St. Louis.

Land Tenure

423 By 31 December 1937 provisional concessions had been granted over an area of 12 square miles and concessions over 15 square miles. By the same date there had been granted under the immatriculation system 9,630 certificates of title, covering 177 square miles. Under the process of Confirmation of Native Land Rights, 40 certificates had been granted, covering 3½ square miles. These figures are very small for the size and population of the colony.

Labour

466 [646] The Colonial Council is responsible for the fact that forced labour has been redeemable by every person since 1921. This reform did not become universal in the Federation till several years later. In 1930 a resolution of the same council compelled owners of motor vehicles to lend them for work under the same system.

In 1935 there were 408,000 persons on the forced labour rolls, 1,415,000 man-days were worked, and 561,300 francs were paid in redemption money. During 1936 official figures showed 1,000 labourers working under written contracts for private concerns, while 31,800 were working on verbal agreements. For public services there were only 20 working with written contracts and 8,900 without. These figures apply only to regular employment, and they take no account of casual labour of any kind. 466 [675]

The fertile provinces of Baol and Sine-Saloum annually attract thousands of immigrant labourers from French Sudan to grow ground-nuts. It is estimated that, in some years, as many as 60,000 Sudanese labourers (*navétanes*) cross the border, encouraged by cheap fares on the railways and advances of pay from the Chambers of Commerce. In 1932 these advances amounted to 300,000 francs. On their arrival they do not work for daily hire, but each labourer takes up a plot for the season. The landowner provides the seeds, and also board and lodging for the labourer. In return the labourer works on the owner's plot for two, three, or four days a week. At the close of the season the proprietor takes either one-tenth of the crop or double the quantity of seeds that he supplied, leaving the rest of the crop to the labourer. Most labourers return to their homes at the end of the harvest, but occasionally they stay on till they have accumulated the sum they set out to acquire. 167 464 [441] [654] 477 465 167 464

Agriculture

The first director of agriculture of Senegal may be said to have been Richard, one of the survivors of the *Méduse*. Under him experimental gardens were founded at Richard Toll about 1820. These are still in existence. The present organization of the Department of Agriculture is laid down by an order of 22 January 1932. Working in close contact with local administrative officers, it manages experimental gardens and farm schools, gives information and instruction to farmers, conducts campaigns against agricultural pests, and organizes agricultural shows. The Department has a laboratory at Hann and an experimental station at Bambey. This was opened in 1924 and is devoted principally to the study and improvement of ground-nuts. Besides these institutions the Department owns various smaller stations for study, experiment, and instruction. 647 654

Forestry. The Department of Agriculture had charge of forestry until an order of 10 February 1937 created a separate Forestry Department and divided the colony into four forestry districts (*inspections*), with headquarters at St. Louis, Thiès, Ziguinchor, and Tambacounda respectively.

22:Winterbotham et al. K-4 (no date) 1944 MS37 Senegal MS 37

647
656 *Produce Inspection.* Produce inspection is entrusted to a board nominated by the Chambers of Commerce, but the Government keeps a tight control by exercising a veto on all important appointments to its staff. The Board's inspectorate has very wide powers of inspection over produce, whether destined for local consumption or for export. No produce to which inspection applies can be sent out [439] of the colony without a certificate of purity.

For this inspection a special tax of 5 francs per ton on ground-nuts [651] and palm kernels, and 20 francs per ton on rubber, is imposed on produce intended for export.

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[647] *Native Provident Societies.* There are 14 Native Provident Societies. Bignona and Ziguinchor have combined, but otherwise there is one to each province. In 1937 they had 1,200,000 members, whose annual subscriptions varied from 2·50 francs to 5·00 francs each, and their expenses were some 25,000,000 francs. They supplied over 44,000 tons of ground-nut seeds to their members.

[232] In earlier days the Sine-Saloum society imported stallions from the Argentine for the breeding of mules, and in 1932 the societies devoted nearly 250,000 francs to the purchase of motor vehicles. In cattle-breeding districts they supply breeding stock and improve water-supply and pasturage. By 1933 it was estimated that the societies had sunk over 1,200 wells, while the society of Thiès had [312] constructed a barrage for irrigation purposes.

[426] In addition to strictly agricultural activities, the Senegal societies help their members by advances of cash, which are made not only to meet failure of crops, but also in cases of individual accident or illness.

Mining

656
316 At the end of 1937 the following permits were in force:

Personal licences		4
The Occupation System		
Exclusive licences	10	
Mining licences	32	
Concessions	18	
		60
Total		64

Education

871
797 The first attempts to educate the natives of French West Africa were made in Senegal, and they were also remarkable for being instituted, not by missionaries, but by the Crown. Colonel Schmaltz

took with him a lay schoolmaster, who opened a school for boys at 871
St. Louis in 1817. Its pupils varied in number from 60 to 100, and 797
it continued under state and lay control until 1841. In that year its management was handed over to Roman Catholic priests, while the Government undertook to maintain the school and to pay for its equipment and the salaries of its teachers.

Girls' education dates from 1826, when the Sisters of St. Joseph of Cluny founded schools at St. Louis and Goree.

By 1854 there were four schools in Senegal. They all belonged to Roman Catholic missions supported by government grants, and they counted only 590 pupils on their rolls. There were difficulties regarding the admission of Moslems to these schools and, as Islam was the prevailing faith, the spread of education was hindered. In 1857
Faidherbe opened a Moslem School at St. Louis, and until 1903 this 872
remained the only lay primary school in Senegal. By 1898 there were 9 primary schools in the four communes and about 30 in the protectorate. These were staffed by interpreters and non-commissioned officers, and their existence was spasmodic. At that time elementary
education throughout French West Africa was mainly in the hands of [797]
the missions, and, so far as the Government took any interest in it at all, it was organized by local regulations in each colony. The
Governor-General's order of 24 November 1903 set up a uniform [648]
system of state-controlled education throughout the Federation.

In 1938 Senegal and Dakar had 132 European teachers and 337 875
native in Government schools and 48 teachers in recognized private schools. Pupils were arranged as follows:

871

	Schools	*Boys*	*Girls*	*Total pupils*
GOVERNMENT SCHOOLS				
Primary				
Village schools	72	5,946	241	6,187
Regional schools	16	4,590	432	5,022
Urban schools	10	3,392	752	4,144
Higher Primary	2	158	14	172
Technical	4	146	0	146
	104	14,232	1,439	15,671
PRIVATE SCHOOLS				
Primary	13	1,164	293	1,457
Totals	117	15,396	1,732	17,128

There were also 2,295 Moslem schools giving rudimentary instruction to 16,190 pupils.

874 In 1927 apprentice courses in woodwork and metalwork were started in St. Louis and Kaolack by the Public Works Department for selected schoolboys between the ages of 13 and 16 years.

871 There is a number of educational institutions in Dakar of a higher grade than primary. These are the responsibility of the Federal Government and have been described in Volume I.

Health

743 Senegal is divided into thirteen medical districts, each of which is intended to be under the supervision of a European medical officer. There are 17 medical stations, each under a native auxiliary. There are also 16 maternity centres and 117 posts visited once a week by a medical officer.

In 1937 Senegal and Dakar had 3 major hospitals and 34 minor hospitals and dispensaries. These provided 394 beds for European patients and 1,805 for native. There were 80 European medical officers, 31 native auxiliaries, 30 midwives, 124 male nurses, and 21 female nurses.

[744] In addition there were four travelling parties (*groupes sanitaires mobiles*). One of these specialized in fighting sleeping-sickness in the Casamance Territory, and the other three were concerned with more general sanitary and prophylactic measures.

The Pasteur Institute at Dakar, a federal concern, is justly famous. [797] Some medical work is done by missionaries. Unofficial committees of the Croix-Rouge are concerned with infant welfare at Dakar, Diourbel, St. Louis, and Tivaouane.

[652] In 1937 Senegal voted 12,000,000 francs for medical services and Dakar 11,000,000 francs.

10. PORTS

36 St. Louis (16° 01'; 16° 30' W.). Population, 30,586, including
[131] 1,231 Europeans. Colonial capital of Senegal and of Mauritania.
[162] Full Commune. Headquarters of the province of Bas Sénégal.
[489] Custom-house. Law courts. Chamber of Commerce. Hospital
[743] and dispensary. Army headquarters and barracks. Police head-
[712] quarters. Belgian Consulate. Meteorological station. Landing-
[648] ground. Wireless station. Lycée Faidherbe. École des Fils des
[654] Chefs et des Interprètes. Higher Primary and Technical Schools.
Protestant and Roman Catholic missions. Bank of West Africa.
[697] Power station. Prison. Hotels. Garages. Race-course. Botanical
gardens. Experimental plantation. Daily market.

22: Winterbotham et al. K-4 (no date) 1944 MS37 Senegal MS 37

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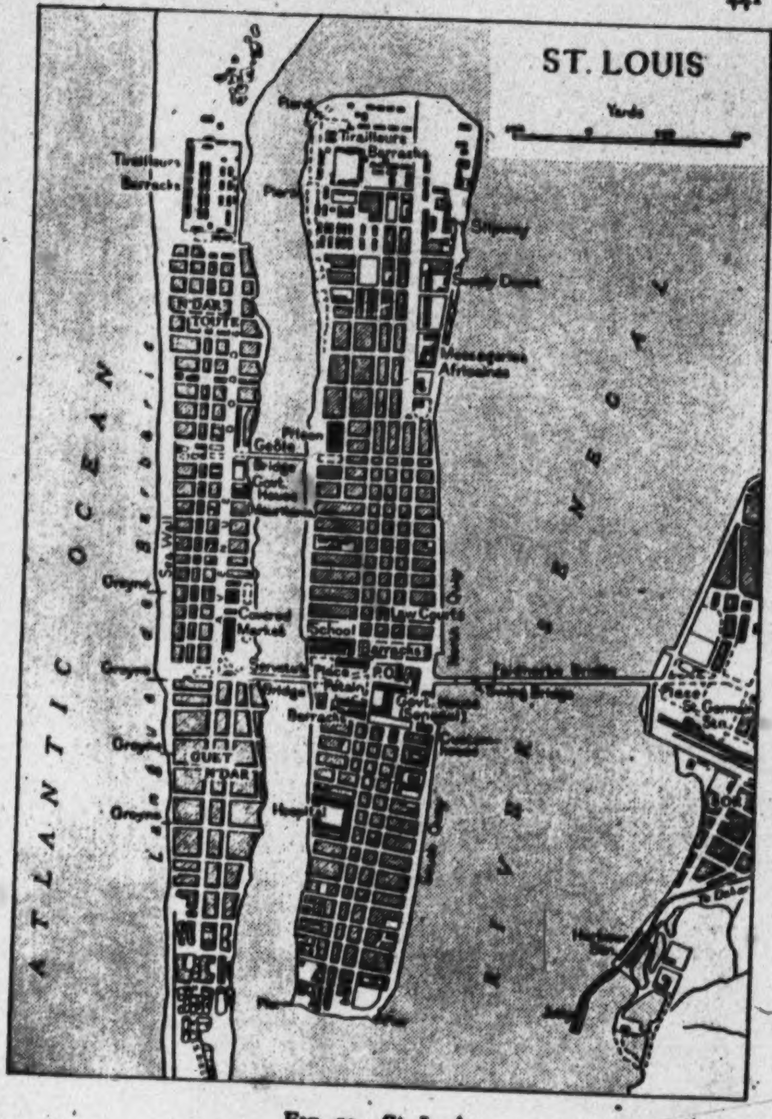
ST. LOUIS
Yards
ATLANTIC OCEAN
Langue de Barbarie
RIVER SENEGAL
Tirailleurs Barracks
Tirailleurs Barracks
Slipway
Messageries Africaines
N'DAR TOUTE
Prison
Geôle
Bridge
Covered Market
School
Law Courts
Barracks
P.O.
Faidherbe Bridge
Place Pétain
Govt. House
Barracks
GUET N'DAR
Hospital
Sea Wall
Groyne
Groyne
Groyne
Groyne
St. Germain
SOR

Fig. 53. *St. Louis*

22:Winterbotham et al. K-4 (no date) 1944 MS37 Senegal MS 37
ST. LOUIS

361 The oldest part of St. Louis (Fig. 53) stands on an island in the estuary of the Senegal. This island is some 2,400 yards long and averages 350 yards in width, and its southern extremity is 13½ miles from the mouth of the river. It has three main suburbs, N'Dar Toute and Guet N'Dar on the Langue de Barbarie, and Sor on the mainland.

History

361 Early navigators in search of the gold of Bambouk used the Senegal
175 as a means of entry to the interior, and in 1658 a settlement was
[487] founded. This was the first French post in West Africa, and it was
named after the patron saint of King Louis XIV. Its story has largely
[103] been told elsewhere, since, from the first, it played a prominent part
in the general history of French West Africa as a whole and of
Senegal in particular. The main events in the past were its capture by
[648] the British in 1759, its recapture in 1779, its second capture in 1809,
and its final restoration to the French in 1817. During the eighteenth
and nineteenth centuries it steadily grew in size and wealth, but in
recent years it has been forced, both commercially and politically, to
yield to Dakar.

The Town

361 The original island is now almost completely covered with
buildings. These include Government House (Senegal), the Law
Courts, the principal barracks, the power station, and the Roman
Catholic church in the centre; the prison, two mosques, and another
barracks to the north; and the hospital and another mosque to the
south. N'Dar Toute has Government House (Mauritania) (Plate 92),
the market, and yet another barracks, and Sor has the railway stations
[964] and the cemeteries. Guet N'Dar is inhabited almost entirely by
natives.

491 The western arm of the river is crossed by two bridges. The
361 Geôle Bridge, 150 yards long, connects the main town to N'Dar
Toute, and it takes its name from the prison near its eastern end.
Five hundred and sixty yards south of it is the Servotuis Bridge, the
western end of which marks the dividing line between N'Dar Toute
and Guet N'Dar. At the other end of it is an open space at present
called Place Pétain. In a line with the Servotuis Bridge is the
Faidherbe Bridge across the main stream. Built in 1900, this bridge
is 570 yards long and has six fixed spans and a roadway 37 feet wide.
Near its western end is a swing bridge with two openings each of
30 yards.

22:Winterbotham et al. K-4 (no date) 1944 MS37 Senegal MS 37
ST. LOUIS

30 yards. Immediately east of it is the Place St. Germain, on the south-west side of which stands the main railway station. 361

The western side of the Langue de Barbarie has been reinforced by groynes and a sea-wall.

The town as a whole is well planned, and it has many shops and offices.

Trade

The chief exports are oil-seeds and skins. Imports are mainly manufactured goods. In 1937 the former weighed 30,400 tons and were valued at 31,600,000 francs (£253,990), and the latter weighed 8,300 tons and were valued at 11,900,000 francs (£95,640). 439

Description of Port

Anchorages. Outside the bar at the river mouth there is anchorage in 9–11 fathoms. Inside it there is again a depth of 11 fathoms, which gradually decreases until it is 5 fathoms just below Faidherbe Bridge. 504 [133]

Quays. The principal quays are on the east side of the island. North Quay (Plate 115), above Faidherbe Bridge, is 1,050 feet long, and South Quay, below it, is 1,770 feet long with an alongside depth of 12 fathoms. At the harbour station in Sor there is a jetty 600 feet long with a wharf at its head. There are four small piers on the island, whose positions are shown in Fig. 53.

Equipment. There is a steam crane some 600 yards above the North Quay and a slipway a little higher still. Minor repairs can be effected, but facilities are generally poor.

Fuel. A small stock of coal is kept, but no oil.

Communications

Rail. There are three railway stations (p. 467) in Sor, and the main station is the terminus of the line to Dakar (Route 1). 498

Road. The intercolonial road to Thiès (124 miles) and Dakar (168 miles) starts from the Place St. Germain and then turns south when clear of the goods station. At this point the Imperial road branches off north-east to Rosso (66 miles) and ultimately to Tindouf (1,315 miles). There is a bus service twice a week to and from Matam and Nayes. 491 494

Air. The airfield is 3½ miles north-east of Place St. Germain. Its surface is hard clay and it has one hangar. In normal times there is a weekly Air France service to Dakar. 508 509

[ST. LOUIS]

206 *Wireless*. The wireless station is to the south of Guet N'Dar.

River. Above Faidherbe Bridge the river is closed to all vessels not
505 flying the French flag. Boats drawing 10 feet can ascend to Podor all
[648] the year round, and in the rainy season they can reach Kayes (Vol. I,
p. 367). Table V shows how greatly river traffic on the Senegal has
declined in recent years.

TABLE V. *Tonnage of Goods from Kayes*

[497]
[494]

	1928	*1929*	*1930*	*1934*	*1935*
Sent by rail or road	9,545	9,555	11,456	5,269	6,224
Sent by river	2,520	5,815	3,425	313	260

Shipping. There are no sea-going ships calling regularly, but the Messageries Africaines and the Messageries du Sénégal run services up-river.

36 **DAKAR** (14° 39′; 17° 25′ W.). Population, 80,052, including *c.* 6,000
[131] Europeans. Capital of the Federation and Headquarters of the
[162] District of Dakar. Full Commune. Custom-house. Law courts.
[489] Chamber of Commerce. Pasteur Institute. Hospitals. Naval base
and dockyard. General Headquarters of the army in French West
[712] Africa. Police headquarters. British Consulate-General. Belgian,
[648] Brazilian, Czechoslovakian, Danish, Eireann, Greek, Italian,
Netherlands, Norwegian, Swedish, and Swiss Consulates. Argentine, Finnish, Spanish, and Uruguayan Vice-Consulates. Meteoro-
[654] logical station. Airport and seaplane base. Wireless stations.
[508] Colleges and schools. Protestant churches. Roman Catholic
Vicariate Apostolic of Guinea and Vicariate General. Bank of
West Africa. Banque Commerciale Africaine. Crédit Foncier de
l'Ouest Africain. Banque Belge de l'Afrique. Power station.
[697] Prison. Public library. Hotels. Garages. Railway workshops.
[498] Cinemas. Race-course. Sports stadium. Botanical gardens.
[654] Agricultural experimental station. Daily market.

Dakar (Fig. 54) is approximately 2,600 miles distant from South-
361 ampton, from Cape Town, and from Rio de Janeiro. It is, therefore,
well placed for taking a share in the trade of the South Atlantic, and it
[433] is small wonder that it has become the third port in the French
Empire, being surpassed only by Marseilles and Le Havre. It is,
moreover, of the first importance strategically.

22: Winterbotham et al. K-4 (no date) 1944 MS37 Senegal MS 37

[p 445]

36
504
764
206
502
102
743
712
498
133

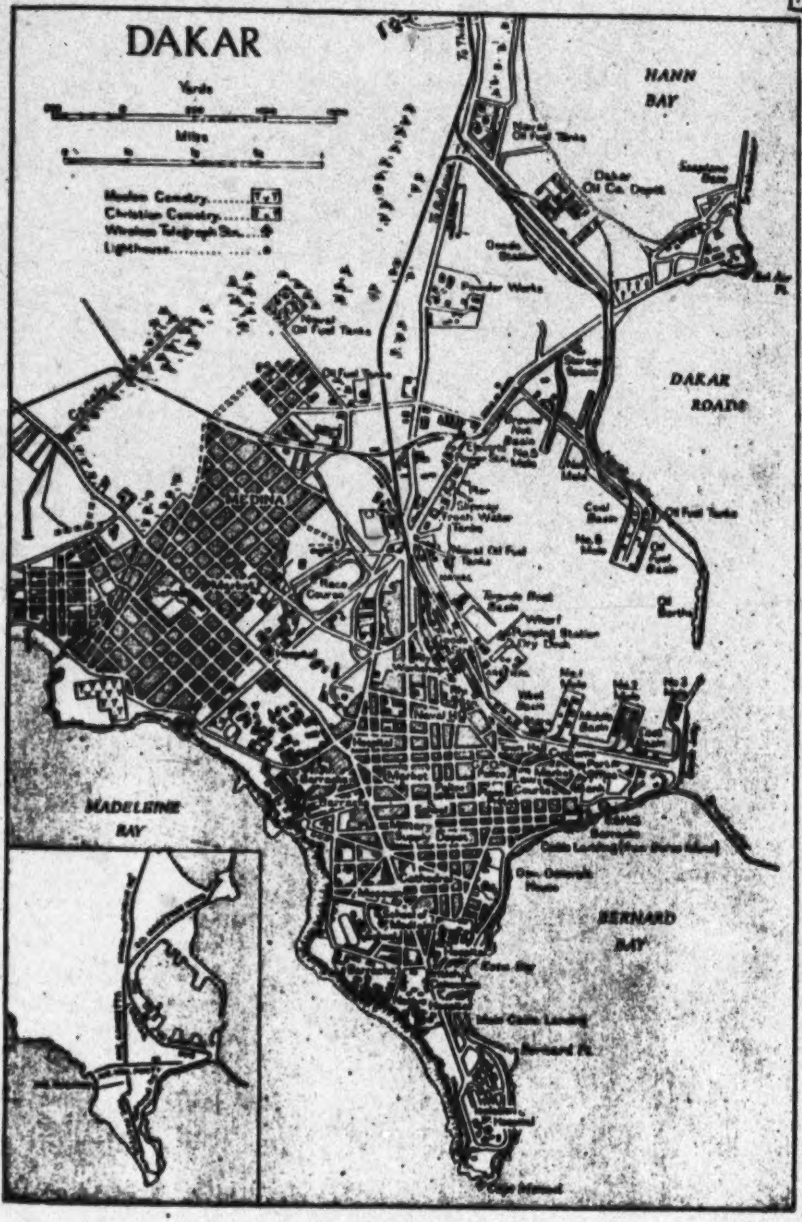
DAKAR
Yards
Miles
Moslem Cemetery
Christian Cemetery
Wireless Telegraph Stn.
Lighthouse
HANN BAY
Naval Oil Fuel Tanks
Dakar Oil Co. Depot
Seaplane Base
Bel Air Pt.
Powder Works
Naval Oil Fuel Tanks
Oil Fuel Tanks
DAKAR ROADS
MEDINA
Coal Basin
Oil Fuel Tanks
Race Course
Fresh Water Tanks
Naval Oil Fuel Tanks
Torpedo Boat Basin
Wharf
Pumping Station
Dry Dock
Oil Berths
Naval HQ
Market
MADELEINE BAY
Barracks
Cable Landing (from Gorée Island)
Gov. General's House
BERNARD BAY
Bernard Pt.
Cape Manuel

FIG. 54. *Dakar*

22: Winterbotham et al. K-4 (no date) 1944 MS37 Senegal MS37
Dakar

History

175 Until the middle of the nineteenth century Dakar was a Lebou
361 village. In 1846, however, a Roman Catholic convent was built there,
[797] and eleven years later the village and the Cape Verde peninsula were
officially occupied. In 1858 the French Government signed a
contract with the Messageries Impériales (now the Messageries
Maritimes) whereby ships sailing between Bordeaux and Rio de
Janeiro would call at Dakar. The company acquired 7¼ acres of land
near Dakar point, and in 1863 a small jetty was built. This was the
beginning of the port. In 1864 a lighthouse was constructed near
[502] Cape Verde and three years later two others, respectively at Almadi
[496] point and at Cape Manuel. In 1885 the railway to St. Louis was
opened. It was not, however, until 1898 that the idea was conceived
[712] of making Dakar a big naval base, and by 1910 it was capable of
accommodating vessels of all types. Further improvements have
[504] since been effected, and to-day the dry dock is big enough to take a
battleship.

The Town

361 Dakar has grown so as to cover the southern part of the Cape Verde peninsula, but the port is on the east side of the town. On the south-west are the cliffs of Madeleines bay and on the south-east those of Bernard bay. Dakar point marks the northern end of the latter. North of the port is Bel Air point, the southern limit of Hann bay.

The medina or native town, which contains nearly half the popula-
tion, is to the north-west of the main town. The intercolonial road
[491] enters the latter from the north and is continued as the Avenue
Gambetta and the Avenue Maginot to an open space where stands
[368] the Roman Catholic cathedral. East of the cathedral is the Residence
of the Governor-General (Vol. I, Plate 58), magnificently situated on
the top of the cliffs overlooking Bernard bay. Farther south are the
British Consulate, the Pasteur Institute, the botanical gardens, and,
[943] almost at Cape Manuel, the isolation hospital. The buildings of the
army headquarters are near Dakar point. West of them are the port
offices, the telephone exchange, the principal market, the Mairie
(Plate 117), and the law courts. The town contains innumerable shops
and offices and many clubs, cafés, hotels, and other amenities of
modern civilization.

22:Winterbotham et al. K-4 (no date) 1944 MS37 Senegal MS37
Dakar

Trade

Imports and Exports. Dakar is the outlet for almost the whole of 439 French West Africa north of the forest. In particular it serves the most fertile and prosperous parts of Senegal and French Sudan. The [433] principal export is, of course, ground-nuts, and others are gold, gum, shea butter, kapok, and hides. Imports include manufactured goods of all kinds, coal, oil fuel, wine, sugar, and flour. In 1937 imports totalled 1,298,700 tons to the value of 763,200,000 francs (£6,134,060) and exports 1,284,300 tons to the value of 572,300,000 francs (£4,599,740). This represents some 40 per cent. of the total trade of [433] the Federation.

Manufactures. In or near the town are brickworks, a brewery, 438 candle factories, charcoal furnaces, ice factories, sisal cleaning plants, sack factories, saw-mills, and factories for extracting ground-nut oil. There are also native handicraft workers. West of the town there are 316 two basalt quarries, which are connected to the harbour by a railway line.

There are several trade unions. 467

Finance. The Port of Dakar has its own budget. In 1938 this 652 balanced at 10,792,486 francs (£66,212). The principal items of revenue were the dues on the loading and discharge of cargo, which [651] brought in 4,150,000 francs, the dues paid by ships, which brought in 1,566,000 francs, and the charges for the use of port equipment, which brought in 1,115,700 francs. The principal items of expenditure were 4,912,166 francs on wages and salaries of employees and 2,551,770 francs on the materials used in the maintenance of the port.

Description of Port

Anchorages. Outside the harbour there is good anchorage in 504 10 fathoms. Inside depths are greater, and there is space for a large number of vessels.

Quays and Wharfs. The main basins of the harbour are divided off from Goree bay and Dakar Roads by the North Jetty. This runs south-eastwards from the shore for nearly 1,200 yards and then turns southwards for its last 550 yards. Here are found the oil berths, and at the end of it is a light. Three moles project from the [502] landward side of the main jetty. Behind No. 5 Mole, the nearest to the land, there is a large open space used for storing dumps of ground-nuts (Vol. I, Plate 84). This end of the harbour is a seaplane base, [508] with a hangar on the shore. On the north-west side there are some

[facing p 448]

118. *Dakar from above the South Jetty*

361
504

22:Winterbotham et al. K-4 (no date) 1944 MS37 Senegal MS 37
Dakar

504 small piers and a slipway. A quarter of a mile south of the slipway are the naval oil-fuel tanks, which are at the northern end of the dockyard. This has, among other works, a large basin and a dry [498] dock, and behind it are the railway goods station and workshops. Just beyond its southern corner is the main station, but extensions of the line run on to the wharfs. On the south side of the harbour are the three principal commercial basins, separated from each other by moles. The easternmost of these is the South Jetty, at the northern [502] end of which is another light, only 275 yards from the end of North Jetty.

From Dakar point a breakwater runs for 1,000 yards south-east and east.

Alongside depths vary from 21 feet at No. 1 Mole to 34 feet at No. 8 Mole, and the total length of quays and oiling berths, apart from those in the dockyard, is 13,861 feet.

Warehouses. There are warehouses on No. 1 Mole, No. 2 Mole, and No. 3 Mole, and all along the south side of the harbour.

Equipment. The dry dock is 656 feet long and 93 feet wide and can be divided into two parts. There are numerous cranes of all types, including floating cranes. The two largest of these are each of 125 tons. Repair facilities are good, and the port is well supplied with tugs, launches, and lighters.

Fuel. The commercial oil-fuel tanks are on the south shore of Hann bay. Behind them is a goods station. Additional naval oil tanks are farther north-west. A pipe-line connects the commercial tanks to the oil berths at the end of North Jetty. Coal is stored on [439] No. 8 Mole. It is very largely imported from South Wales. Good stocks of both fuels are normally held.

Communications

498 *Rail*. Dakar is the terminus of the railway from Thiès and St. Louis (Route 1). From Thiès Route 2 runs to Kidira (396 miles) and ultimately to Koulikoro (801 miles). The main station is at the south-east corner of the harbour, close to the dockyard.

491 *Road*. It has already been stated that the intercolonial road runs north from the end of Avenue Gambetta. It follows the curve of Hann bay to Rufisque (15 miles) before going to Thiès (44 miles). A minor road leads north-westwards to Ouakam (5 miles) and Yof (8 miles). There are also other minor roads.

508 509 *Air*. The airport lies nearly 5 miles north-west of the main town, and has hangars and workshops. In 1939 Dakar was on the Air France

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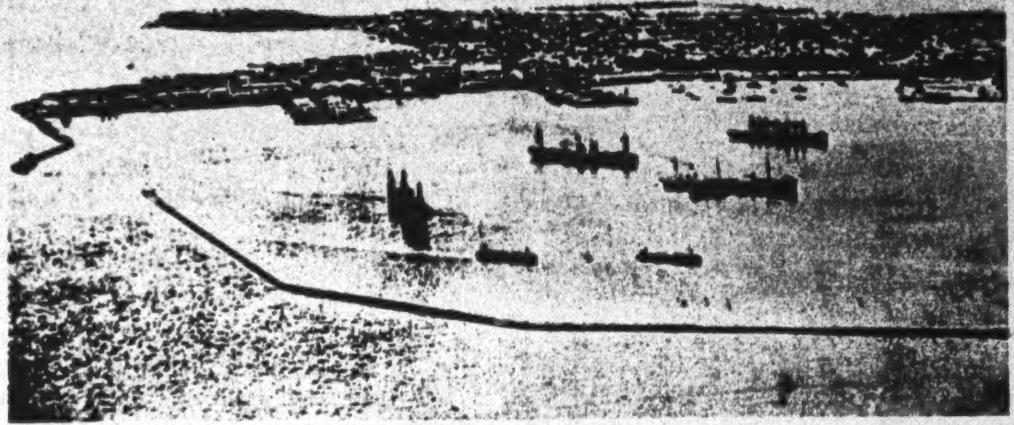
503



119. *Dakar: the port*

[facing p. 449]

22:Winterbotham et al. K-4 (no date) 1944 MS37 Senegal MS 37

[DAKAR]

route from Paris to Santiago and was also the terminus of local services 509
to Bamako and to St. Louis. The Aéromaritime company used to run flying-boat services to Conakry, Abidjan, Lagos, Douala, and Pointe Noire.

Wireless. The broadcasting station is near Madeleines bay, 206
700 yards north-west of the cathedral. A small station, transmitting to ships, is on Bel Air point.

Cable. Dakar is connected by cable to Casablanca, to Brest, to Fernando Noronha (Brazil), and to Conakry. The two latter cables are landed in the south-west of Bernard bay, not far from the Pasteur Institute. There is, however, a telephone cable to Goree island. This is landed on the north-west shore of the same bay.

Shipping. Lines normally serving the port include the following: 505
America West African, Bull, Chargeurs Réunis, Elder Dempster, Fabre, Fraissinet, Gdynia America, Hamburg-Bremen, Holland West Afrika, Italia, Lloyd Triestino, Maurel et Prom, Messageries du Sénégal, Navigazione Generale Italiana, Société Générale des Transports, Société Maritime Belge des Transports, and Société Navale de l'Ouest.

Coasting vessels sail regularly for Port Etienne, St. Louis, Kaolack, and Ziguinchor.

Goree (14° 39'; 17° 23' W.). Population, 714. Custom-house. 36
Barracks and military hospital. [131]

The rocky island of Goree (Plate 112) has an area of 138 acres. The [162]
first Europeans to land on it were the Portuguese in 1445, and since [712]
then it has had a chequered history, which has been told elsewhere [175]
in these volumes.

Most of the centre of the island is occupied by buildings, and in
the south there is the old fort. In the extreme north is a large lime- [381]
kiln.

The only source of water is an artesian well in the fort. [312]

Trade. Trade is now limited to the ordinary requirements of the
islanders, and traffic to taking them and their goods to and from the [938]
mainland.

Harbour. In the north-east of the island there is a little bay where [504]
there are three jetties, only one of which (Plate 121) is now in use.
The depth at its head is 10 feet.

Rufisque (14° 41'; 17° 12' W.). Population, 19,764, including [131]
180 Europeans. Full Commune. Custom-house. Medical post. [162]
Barracks. Police headquarters. Power station. Hotel. Garage. [712]

[RUFISQUE]

439 Rufisque was the first port from which ground-nuts were exported,
and to-day ground-nuts are still the main article of trade. In the first
quarter of 1939 it exported 25,152 tons of them. On the north side
504 of Goree bay, Rufisque can only handle small ships. There is anchorage off shore in 3–7 fathoms, but from July to November heavy swell
makes it almost unusable.

633 Since 1937 the town has been in the District of Dakar.

Jetties and Equipment. There are three jetties with alongside depths
504 of at least 9½ feet. Two of these are of iron, one being 603 feet long
and 33 feet wide with an extension by a wharf 65 feet long and 52 feet
wide. The third is of concrete and is 656 feet long. Decauville tracks
connect these jetties to the railway. There is one 5-ton crane and one
2-ton, besides smaller ones. There are 4 tugs and 2 lighters.

Communications

496 *Rail*. By rail Rufisque is 17 miles from Dakar, 26½ miles from Thiès, 146 miles from St. Louis, and 268 miles from Tambacounda.

Road. The intercolonial road runs from Dakar (15 miles) through
491 to Thiès (29 miles), where it divides. Eight miles beyond Rufisque
a colonial road branches off it to go to M'Bour (38 miles), Joal
(61 miles), and Fatik (101 miles). Another colonial road goes north-eastwards from the town to Sangalkan (6 miles) and Kayar (17 miles).

36
[131]
[162]
M'Bour (14° 21′; 16° 57′ W.). Population, *c.* 4,500, including 175 Europeans. Mixed Commune. District headquarters. Custom-house. Medical post. Police station.

The town of M'Bour stands at the head of a shallow cove which
extends for a mile out to sea as a passage between two reefs. Inside
[504] the cove the water is up to 4½ feet deep, and there is a wharf used by
surf-boats. Ships anchor 2½ miles off shore, but heavy swell makes
[439] conditions difficult from June to November. Ground-nuts and millet
are exported.

M'Bour is on the colonial road from Rufisque (38 miles) to Joal
[491] (23 miles) and Fatik (63 miles). Several minor roads lead inland,
[494] notably one to Thiès, along which there is a bus service twice a day.
For half the year there is also a service to Joal.

[131]
[162]
Joal (14° 09′; 16° 51′ W.). Population, *c.* 900. Custom-house. Roman Catholic mission.

Joal was founded by the Norman Company in the middle of the
[175] seventeenth century. It was captured by the Dutch in 1677 and by

22:Winterbotham et al. K-4 (no date) 1944 MS37 Senegal MS 37

[JOAL]

the British 70 years later, and it did not finally become French until 36
1763. It is on a sandspit in front of a coastal lagoon. Off shore there [175]
is a large sandbank, exposed at low tide.

There is a small wharf, but, owing to the difficulty of access, there [504]
is very little trade. In 1937, for example, only 4,600 tons of goods [439]
were handled and their value was 4,600,000 francs (£36,970).

The colonial road from Fatik (40 miles) to M'Bour (23 miles) and [491]
Rufisque (61 miles) runs through the town. There are also minor
roads. From November to June there is a bus service to M'Bour [494]
and Thiès four days a week.

Foundiougne (14° 06'; 16° 29' W.). Population, 2,734. Mixed [131]
Commune. District headquarters. Custom-house. Medical post. [162]

Foundiougne is on an island formed by the Saloum, the Djomboss, and their connecting channels. Much of the district is swampy, but the town itself is on a piece of firm ground on the left bank of the Saloum, 33 miles from the sea.

Anchorage in the river is in 3½ fathoms. There are 8 wharves, of [504]
which 1 is owned by the municipality.

The principal export is ground-nuts, but in recent years Foun- [439]
diougne has declined in prosperity. This is owing to the rise of [433]
Kaolack, which is better situated on the north bank of the river
and which has much better communications.

There is a ferry across the river, and from its far side a rough road [491]
leads to Fatik. South of the river there is a colonial road eastwards
to Kaolack (32 miles). Along both these roads there is a bus service, [494]
daily in the dry season and fortnightly in the wet.

Fatik (14° 18'; 16° 27' W.). Population, 3,521, including 128 Euro- [131]
peans. Mixed Commune. District headquarters. Medical post. [162]
Police station. Emergency landing-ground. Regional School.
Garage.

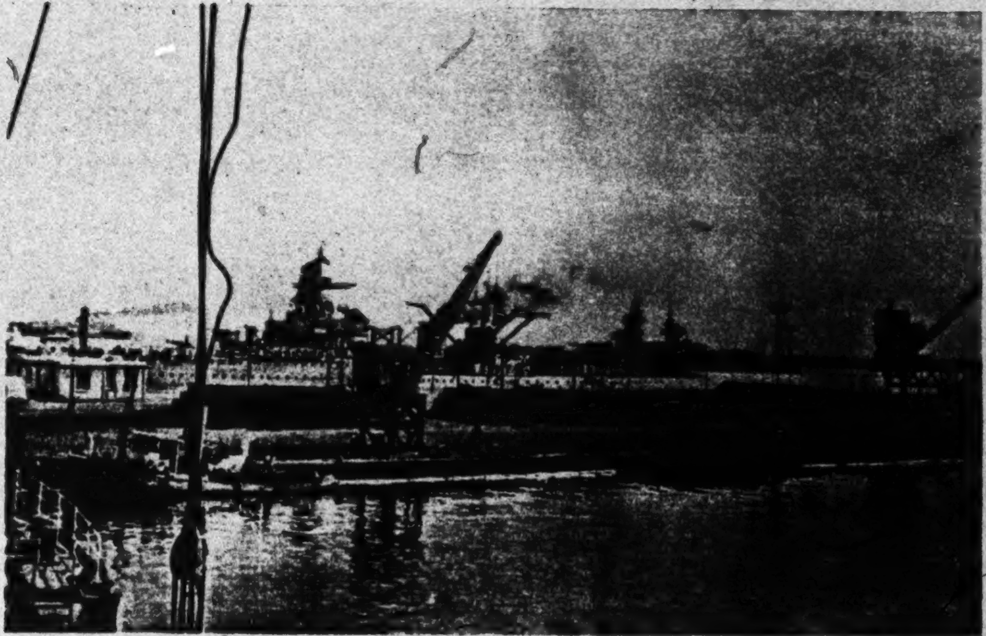
At Nonane, on Marigot de Fatik 14½ miles above its junction with
the Saloum, is the site of one of the old *escales*. This is the upper
limit for boats drawing 10 feet, but smaller craft can ascend a further [505]
7 miles to Fatik, 58 miles from the sea. The town is on the right bank [487]
of the river, which is here called the Sine.

Trade is chiefly in ground-nuts. [439]

Colonial roads lead north to Bambey (27 miles), south-east to [491]
Kaolack (28 miles), and south-west to Joal (60 miles), and a minor
road south to Foundiougne.

The landing-ground is half a mile west of the town.

[facing p 452]



120. *Dakar: Mole No. 8*

504

22: Winterbotham et al. K-4 (no date) 1944 MS37 Senegal MS.37

36 [131] [162] **Kaolack** (14° 07′; 16° 07′ W.). Population, 21,973. Mixed Commune. Headquarters of the province of Sine-Saloum. Customhouse. Chamber of Commerce. Medical post. Police headquarters. Meteorological station. Landing-ground. Wireless station. Regional School. Roman Catholic mission. Bank of West Africa. Banque Commerciale Africaine. Hotels. Garages. Race-course.

[439] Kaolack exports more ground-nuts than any other port in the Federation. It is a well-planned town with squares and trees, and it is on the right bank of the Saloum, 71 miles above its mouth, where [487] the river is 100 yards wide. It is the limit of navigation for sea-going [505] ships.

[162] In 1904 Kaolack had only 300 inhabitants, but the development of communications in the neighbourhood has caused it to grow to its present size. The figure given above is for the permanent popu- [166] lation only. At the height of the ground-nut season there are an additional 20,000 temporary inhabitants.

Trade

[439] During the first quarter of 1939 Kaolack exported 32,259 tons of ground-nuts (Plate 122), as against 26,832 tons from Dakar. Owing to the bar across the Saloum, however, many ships do not load to their maximum capacity but go on to Dakar to complete their lading.

[258] Across the river from the town is a large salt-works.

The Port

[504] On the north bank there are concrete quays with a total length of over 2,000 feet and on the south bank there is a small wharf. At Lyndiane, 9 miles downstream, is a wharf belonging to the firm of Peyrissac et Cie.

Communications

[498] *Rail.* Kaolack is the terminus of Route 5 to Guinguiné (14 miles), and is therefore 142 miles from Dakar. It is also the terminus of Route 6 to Lyndiane (6½ miles). Both stations are close to the river, and there is a line directly on to the quays.

[491] *Road.* Intercolonial roads lead northward to Gossas (25 miles), Thiès (82 miles), and Dakar (126 miles), eastward to Kaffrine (37 miles) and Tambacounda (188 miles), and south-south-westward to Messira (49 miles) and the frontier of the Gambia (57 miles). The last-named road crosses the Saloum by a bridge. A colonial road goes north-west to Fatik (28 miles), another south-east to Nioro

[facing p. 453]

121. *The jetty at Goree*

122. *Ground-nut dumps at Kaolack*

504

22:Winterbotham et al. K-4 (no date) 1944 MSS7 Senegal MS37

[KAOLACK]

(33 miles) and Medina (50 miles), and a third west to Foundiougne 36
(32 miles). [491]

Air. The airfield is 1 mile north-east of the town. [508]

Wireless. The wireless station is in the centre of the town. [206]

Shipping. Boats of the Messageries du Sénégal line call regularly, [505] and the Compagnie de Navigation Paquet maintains a weekly service with Foundiougne, Bathurst, and Dakar.

Ziguinchor (12° 32′; 16° 21′ W.). Population, 6,070. Mixed [131] Commune. Headquarters of the Casamance Territory and of the [162] Province of Ziguinchor. Custom-house. Magistrate's Court. Chamber of Commerce. Hospital and maternity home. Police [743] headquarters. Meteorological station. Emergency landing-ground. Wireless station. Roman Catholic mission. Garages. Daily market.

The first large piece of firm ground upstream from the mouth of the Casamance is nearly 42 miles from the sea, and it is here, on the left bank, that Ziguinchor stands. The depth of the river is 6 fathoms. Jetties have been built at right angles to the waterfront, partly to [504] counteract silting, and ships drawing 15 feet can go alongside them. The quays have a total length of over 3,000 feet and the warehouses a total capacity of some 25,000 tons. There are no cranes, all goods being manhandled.

There is a considerable variety of exports, including ground-nuts, [439] fruit, rice, palm oil, palm kernels, cotton, tobacco, sisal, and hides, but imports are chiefly manufactured goods and building materials. In value of trade Ziguinchor comes between Foundiougne and Rufisque.

Communications

Road. The river is crossed by a ferry, and a colonial road leads [491] north to Bignona (16 miles) and then east to Sedhiou (74 miles) and Kolda (136 miles). Another one goes along the south bank of the Casamance, also to Kolda (130 miles). Minor roads lead south to the frontier of Portuguese Guinea and south-west to Oussouye and Diembering.

Air. Seaplanes can alight in the river, and there is a weekly [509] Aéromaritime service to Bathurst and Dakar. The landing-ground is 1¼ miles south of the town.

Wireless. The two wireless stations are housed in the same [206] building.

36 [131] [162] **Sedhiou** (12° 42′; 15° 31′ W.). Population, 1,653. Provincial headquarters. Medical post. Emergency landing-ground. Regional School.

[487] [505] [439] Sedhiou is on the right bank of the Casamance, 68 miles above Ziguinchor and 110 miles from the sea, and it is only usable by vessels drawing up to 5 feet. Formerly more prosperous than it is to-day, it has some brick buildings and shops. Many of the traders are Syrians, and there is a modest export of ground-nuts, hides, rice, and wax.

[491] By colonial road Sedhiou is 58 miles from Bignona, 74 miles from Ziguinchor, and 62 miles from Kolda.

11. MINERALS

135 [439] The principal mineral exported from the colony is ilmenite, which is washed from beach sands between Rufisque and Cape Rouge, between Joal and Diakhanor, and at the mouth of the Casamance. Zircon (Vol. I, pp. 295–6) is obtained from the same sands, the ilmenite:zircon ratio being about 3:1. Other minerals of potential value are phosphates and limestone, both of which occur in Lower Eocene strata. Lenticular beds of phosphate, ranging from 30 to 65 per cent. bone phosphate of lime, are found near Matam and near Thiès. Limestones and marls are more widespread than in any other [339] colony, and at Rufisque they have been worked experimentally for the commercial production of cement. Bitumen has been encountered at Dakar in borings for water, but investigations have shown that the [315] geological structure is unsuited to the accumulation of petroleum.

12. AGRICULTURE

241 The Gambia divides the millet from the manioc zone, but ground-nuts are the chief crop of both. Sisal-growing is an important, though more recent, industry. South of the Gambia the Casamance Territory provides a rich area for fruit and subsistence crops as well as for ground-nuts.

[439] There is far more production for export than in any other colony.

Food Crops

243 262 *Millets.* Millets form the staple diet of the majority of the native population and are grown all over that part of the colony north of the

22:Winterbotham et al. K-4 (no date) 1944 MS37 Senegal MS 37

Gambia, often in rotation with ground-nuts. Of the quick-maturing 243
varieties *souna* and *senio* are the most popular, the former thriving in [262]
sandy soil, the latter in heavier ground. Several kinds of sorghum
are also cultivated. In the river area millet is sown where the floods
have subsided and is harvested in April. In other parts it is planted
immediately before the rainy season. Production probably averages [433]
about 300,000 tons annually. The export of millet from one province [438]
to another is controlled according to local needs.

Rice. The area flooded by the Casamance is naturally suited for
rice cultivation. The rice-fields are handed down from father to [428]
son, each family growing sufficient for its own consumption and to [262]
pay its taxes. A store of rice is always kept to guard against a lean [251]
year or to be exchanged for some other commodity required.

Sugar-cane. This is grown near every village where there is enough 249
water. No attempt has been made to commercialize the crop, and the
West African varieties are more woody and contain less juice than
those grown elsewhere for export. Sugar-cane (*Saccharum officinarum*)
is a perennial plant of the grass family. It is easy to grow, even near
the sea, but takes at least a year to mature. When grown for local use,
as it is here, sugar is not extracted, but the red or white stems are [263]
chewed.

The Baobab. The baobab (*Adansonia digitata*) is found generally 245
in the thornland (Plate 111), and is, therefore, much in evidence in
Senegal. It is remarkable for the large girth of its trunk in com-
parison to its branches and leaves. The long green fruit, known as [262]
monkey-bread, is used as a food or as a seasoner. Boiled with water [263]
and then cooled, it also makes a refreshing drink, while the leaves [272]
and the young shoots are also good to eat. The inner bark yields a [283]
tough fibre, which can be twisted into rope or woven into a water-
proof cloth. About 30 years ago a factory was opened at Dakar to
prepare the fibre for export to rope- and paper-making firms in [288]
France. The bark and fibre can be stripped off without causing the
death of the tree.

Manioc, beans, and maize are grown generally in the vicinity of 244
villages. In the Cape Verde peninsula these, as well as yams, sweet [243]
potatoes, and melons, are grown for the Dakar markets. [438]

Economic Crops

Ground-nuts. Ground-nuts (*Arachis hypogaea*) require a tropical
climate and an annual rainfall of from 14 to 60 inches. They are the [433]

22:Winterbotham et al. K-4 (no date) 1944 MS37 Senegal MS 37

244 sixth crop of Africa, and 43 per cent. of the total continental produc-
[933] tion comes from Senegal. The two main groups cultivated are the
'runner' and the 'erect'. The Rufisque and Cayor varieties, both
runners, are those grown generally here and also in British West
Africa. The method of cultivation is described in Volume I, p. 321.
Ground-nuts were originally grown as a staple native crop, but the
[939] industrial demand for vegetable oils, coupled with the development
of transport facilities, opened up a world market for them. Extra
[167] labour for the harvest is provided annually by seasonal immigration
from French Sudan, French Guinea, Portuguese Guinea, and the
[464] Gambia. In 1938 the number of outside workers was 69,757. Of
these, 56,743 went to the Kaolack area, between 1,000 and 3,500 to
Sedhiou, Ziguinchor, Kolda, Tambacounda, and Diourbel, and the
remainder to Thiès and Linguéré.

[258] There are numerous shelling factories. Early in 1939 new ones
were opened at Kaolack, Ziguinchor, and Koungheul.

In 1938 nearly 2,000,000 acres were under cultivation and the
[654] experimental station at Bambey distributed 5,414 tons of selected
seed. In 1939 7,382 tons of seed were sent out, with a corresponding
increase in acreage.

[648] During the British blockade of French West Africa after the fall of
France in 1940, ground-nuts were converted into fuel oil. If this
[388] practice has been proved worth continuing after the war, cultivation
may be greatly extended.

248 *Sisal.* Sisal originated in Mexico, being named after the port of Sisal in Yucatan province, and it was introduced into Senegal at the end of the nineteenth century. The species grown are *Agave rigida sisalana*, *A. rigida elongata*, and *A. rigida zapupe*. The rigid leaves containing the fibre are about 4 feet long and are harvested biennially from the fourth to the eighth or tenth year. When a plant has finished producing it shoots up a tall flower stem, with bulbils or buds on the end, and then withers.

283 The preparation of stem and leaf fibres is lengthy. First the fleshy
288 tissue encasing the fibrt is scraped away, and then the fibre is washed,
hung out to dry, and brushed. It is now ready for grading. Next it is
combed into a continuous sliver of untwisted rope. The final process
is the drawing and twisting of the sliver to a uniform thinness for
spinning into a rope that is particularly resistant to sea-water. The
248 largest plantation is in French Sudan, and stretches for 12 miles
along the bank of the Senegal near Kayes. Other smaller ones are in
Tambacounda and on the Cape Verde peninsula. There is oppor-

22:Winterbotham et al. K-4 (no date) 1944 MS37 Senegal MS 37

tunity for much development in this industry, particularly in the 248
irrigated areas of the Casamance Territory and Sine-Saloum. Europeans own the majority of the plantations, but co-operate with and [433]
encourage native growers. During the first quarter of 1939 production in Tambacounda province was 152 tons, and the factory at [288]
Kolda treated 165 tons of fibre.

Ginger. The ginger plant (*Zingiber officinale*) is of Asiatic origin, 244
but it has been cultivated in Africa for many centuries. It is grown on a small scale wherever the rainfall is over 30 inches. It does best in a rich soil and requires shade. The ginger of commerce is prepared from the rhizome or underground stem, which is mature when the leaves turn yellow. The best ginger is prepared from immature [251]
rhizomes, which are peeled and preserved in sugar syrup, but in West Africa the coarser, mature stems are also used. Chewed ginger [276]
is reputed to enhance the stimulating effect of kola.

Pimentos. Several species of *Capsicum* or peppers grow in the Federation. In Senegal the most common are *C. annum* and *C. frutescens*, both bearing red fruits. The former was introduced from South America. It is less pungent and has larger fruits, known as 'capsicums'. *C. frutescens* has hotter fruits, known in commerce as 'chillies'. Cayenne or paprika is the red powder obtained from grounding the fruit. Pepper shrubs are grown from seeds, and after three months bear fruit for at least six months. These red peppers should not be confused with the common pepper, which is a climber and does not grow in West Africa.

Henna. This plant (*Lawsonia inermis*), like sugar-cane, maize, 249
ginger, and castor oil, is grown wherever there is enough water. The plant is much revered by Moslems and often grown as a hedge. The powder of the young, dried leaves is the source of henna dye.

Other Crops. Other products of which small quantities are exported 439
are citrus fruits, gum arabic, shea butter, cotton, kapok, and palm 241
kernels.

Livestock

Livestock are fewer here than in any other colony. Sheep and 231
goats, the latter being the more numerous, are kept near the river between Podor and Bakel and number about 100,000. There are some 310,000 cattle, 50,000 donkeys, 6,000 camels, and 14,000 pigs. These last are mainly kept in the Casamance Territory. There are 36,000 horses. These are of two breeds, the M'Bayar and the M'Par, and

22: Winterbotham et al. K-4 (no date) 1944 MS37 Senegal MS 37
Mali MS 35

231 the former provide mounts for the tirailleurs. Apiculture has increased in recent years, and in 1939 over 59,000 beehives were installed in the provinces of Bakel, Baol, Kolda, and Sine-Saloum.

S *Experimental Stations*

654 There are agricultural experimental stations at Bambey, Dagana, Kolda, Louga, and Tambacounda, nurseries and botanical gardens at Hann, Richard Toll, and Sor, a livestock experimental station at Makhana (11 miles north-east of St. Louis), and farm schools at Diorbivol and Soringho (near Matam). The stations at Bambey and Louga specialize in ground-nuts, those at Kolda and Tambaco[illegible]da in sisal, and that at Dagana in gum and Borassus palms (Fig. 8).

13. COMMERCE AND FINANCE

COMMERCE

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439 OFFICIAL statistics combine Senegal and French Sudan under one head for detailed figures, and, in addition, the general summary of *Commerce Spécial* combines them with Mauritania. These three colonies account for more than 50 per cent. of the total trade of the Federation, and of this percentage Senegal undoubtedly provides a very large proportion.

The Balance of Trade. The value of the imports commonly exceeds that of the exports, but in 1938, the last year for which statistics are available, imports were valued at 1,016,837,000 francs and exports at 1,725,649,000 francs.

Firms. The principal firms are Chavenel et Fils, the Commerce Africain, the Compagnie Française de l'Afrique Occidentale, Dèves et Chaumet, Maurel et Prom, the Nouvelle Société Commerciale Africaine, Charles Peyrissac et Cie., the Société Commerciale de l'Ouest Africain, Soucail et Cie., and Vézia et Cie.

Exports. The principal item of export is the ground-nut. The first export of ground-nuts was made from Rufisque to Rouen in 1840, and since 1844 there have been regular shipments to Marseilles. In 1936, 393,485 tons of ground-nuts in shell (28,452 tons from French Sudan) and 60,448 tons of shelled ground-nuts (4,429 tons from French Sudan) were exported, respectively worth 351,674,905 francs and 73,384,546 francs. In 1937 both quantities rose, the nuts in shell to 517,322 tons worth 431,746,036 francs and the shelled nuts to

22:Winterbotham et al. K-4 (no date) 1944 MS37 Senegal MS 37
Mali MS 35

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117,015 tons worth 126,720,675 francs. The next most valuable export is gold, of which 2,794 lb. Troy were exported in 1937. This was valued at 31,283,505 francs, but the value of the franc itself in that year was beginning to decline. Exports of ground-nut oil increased sharply from 351 tons in 1935 to 5,220 tons in 1937, and those of oilcake from 3,793 tons to 13,015 tons in the same years. Other important exports included gum arabic, sisal, and shea butter and oil.

Imports. The chief import is cotton cloth. Guinées are officially measured in thousand-metre lengths and other cloths in tons. In 1937, 9,662,000 metres (10,566,370 yards) of guinées, valued at 32,197,354 francs, were imported, and 6,825 tons of other cloths, valued at 250,516,890 francs. These amounts represent almost one-third of the total value of all imports for that year, namely 944,766,000 francs. The second most valuable import is oil fuel, and in 1937, 670,344 tons were imported to the value of 133,179,986 francs. Next in value comes rice, of which 115,875 tons worth 110,839,933 francs were imported in 1937. No figures are published for the weight, but machines, machinery, and other metal goods to the value of 93,077,917 francs were imported in the same year. Other imports include wine, coal, sugar, and ready-made clothing; in short, all the products of mine, factory, and farm which French West Africa needs but cannot supply.

Further details of both imports and exports are given in Appendix A.

FINANCE

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Senegal

The budget for 1938 balanced at 120,737,000 francs (£734,583). The details were published as follows:

Revenue

	Francs
I. Ordinary Revenue	
Direct taxes	48,416,000
Customs and excise	35,883,000
Posts, telegraphs, &c.	11,495,000
Grants and subsidies	19,033,000
Receipts from previous financial year	1,200,000
II. Extraordinary Revenue	
Previous withdrawals from the Reserve Bank	4,710,000
TOTAL	120,737,000

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Expenditure

	Essential expenditure Francs	Optional expenditure Francs
I. Ordinary Expenditure		
Debt charges	657,000	..
Salaries of administrative staffs	23,403,000	..
Other administrative expenses	3,861,550	1,994,450
Posts, telegraphs, &c. (salaries and wages)	13,239,200	1,234,800
Posts, telegraphs, &c. (plant and materials)	2,246,800	6,431,200
Public works	141,850	12,485,150
Social and economic departments (salaries)	12,967,200	50,800
Social and economic departments (other expenditure)	2,520,730	9,083,270
Sundry disbursements	24,642,013	1,189,987
Secret funds	10,000	..
Unforeseen expenses	1,000	167,000
TOTALS	83,690,343	32,636,657
II. Extraordinary Expenditure		
Previous payments to the Reserve Bank		4,710,000
TOTAL		120,737,000

Two features emerge from an examination of these figures. One is the customary large proportion of the expenditure paid out in salaries, and the other is the division of the expenditure into 'essential' and 'optional' categories. It will also be observed that only a small percentage of the salaries is found in the latter column.

The District of Dakar

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The budget for 1938 balanced at 60,033,000 francs (£386,301). Its form of presentation was the same as for the ordinary colonies, except that there was no Extraordinary Revenue or Expenditure, and its details were as follows:

Revenue

	Francs
Customs and excise	5,306,000
Posts, telegraphs, &c.	5,488,600
Grants and subsidies	49,189,400
Receipts from previous financial year	49,000
TOTAL	60,033,000

Expenditure

	Francs
Debt charges	10,000
Administration of the District (salaries)	508,000
Administration of the District (other expenses)	155,500

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	Francs
Federal administration (salaries)	10,206,400
Federal administration (other expenses)	1,656,000
Financial department (salaries)	1,447,000
Financial department (other expenses)	370,000
Posts, telegraphs, &c. (salaries and wages)	6,631,000
Posts, telegraphs, &c. (plant and materials)	3,492,000
Public works	6,782,000
Social and economic departments (salaries)	8,868,000
Social and economic departments (other expenditure)	10,850,000
Sundry disbursements	2,726,000
Secret funds	12,600
Unforeseen expenses	25,000
Water department (salaries)	748,000
Water department (other expenditure)	5,545,500
TOTAL	60,033,000

In 1937, however, Extraordinary Expenditure amounted to 8,445,000 francs (£67,875).

The budget for the Port of Dakar has already been given on p. 447.

14. COMMUNICATIONS

WATERWAYS

THE navigable rivers and estuaries of the colony have been fully described in Volume I, pp. 366–7. The principal distances from St. Louis up the Senegal river are as follows: 133 361

	Miles
St. Louis	0
Rosso	82
Dagana	116
Podor	177
Boghé (Mauritania)	247
Kaëdi (Mauritania)	341
Matam	400
Bakel	519
Ambidedi (French Sudan)	574
Kayes (French Sudan)	603

RAILWAYS

There are 648 miles (1,043 km.) of railway in the colony, all of metre gauge. For purposes of description six lines may be distinguished. 496

1. Dakar–St. Louis (163 miles).
2. Louga–Linguéré (81 miles).

22tWinterbotham et al. K-4 (no date) 1944 MS37 Senegal MS37
Mali MS35

S 496

3. Thiès–Kidira (352½ miles).
4. Diourbel–Touba (31 miles).
5. Guinguiné–Kaolack (14 miles).
6. Kaolack–Lyndiane (6½ miles).

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History

The first plan for a railway was made by Pinet-Laprade in 1857. It was to connect the head of navigation on the Senegal with a suitable point on the Niger, and in 1863 Mage prospected the country between Medine and Bamako. During the next fifteen years or so various other schemes were proposed. All of them were chiefly concerned with the military conquest of Cayor, of the middle Niger basin, and of the lands between Timbuktu and Algeria. Many of them envisaged a trans-Saharan line, and there seems to have been little thought of economic development.

On 5 February 1880 a Bill was introduced into the French Chamber of Deputies to authorize a line from Dakar to St. Louis with a branch to Medine and the middle Niger. It was considerably amended before being passed, the chief alteration being the excision of the section from St. Louis to Medine.

S 499 175 Surveys of the two other sections were made, and on 21 June 1882 a contract was signed with the Société de Construction des Batignolles to build a line from Dakar to St. Louis. This company remained the owner of the line until it was bought out by the Government in 1933. European labour was largely employed in construction, and this meant that work had to be suspended from July to November each year. In spite of this and other difficulties, the line was opened on 6 July 1885. This was the first railway in West Africa.

It soon became apparent that faulty methods had been used. The wooden sleepers were eaten by termites and the track had been very poorly ballasted. These defects, however, were eventually remedied.

S [433] The railway achieved its military purpose, but its economic results were of equal value. In particular, it stimulated the production of ground-nuts by providing means for their export. This had important effects on the development of Dakar and of Rufisque.

S M 499 175 [505] Meanwhile a little progress had been made on the section linking the Senegal with the Niger. In contradistinction to the Dakar–St. Louis line, the work was done by the Government. It had an inauspicious beginning. Medine is 625 miles by river from St. Louis and can only be reached by barge in August and September. Material brought from the port was seldom taken farther than Kayes, and goods

22:Winterbotham et al. K-4 (no date) 1944 MS37 Senegal MS 37
Mali MS 35

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were dumped there and at places even farther downstream. These 499
had to be transported upstream in barges drawn by men. Diseases, 175
especially yellow fever, caused many deaths, and there were endless [505]
difficulties with workmen, both European and native. Furthermore, [164]
the country was not fully known and only half pacified. Work began
at Medine in the middle of 1881, but the military post at Kita was
less than six months old, and that at Bamako was not set up until
1883. By the end of 1881 precisely one kilometre of the line had S
been completed. In the following year the ships started from St. M
Louis too late and could not even reach Kayes. There were several [164]
epidemics of typhoid and several fires in the store dumps.

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By 1884 there were 34 miles of track, but it was so badly constructed 499
as to be incapable of supporting the weight of a locomotive. There 175
was no ballast, poor local wood was used for sleepers, curves were
too sharp, and gradients were too severe. In 1888 the work was
handed over to the French Marines, who made some improvements
in the existing track and extended it to Mahina, a distance of 66 miles.
It was still unusable. In the following year a Commission was
appointed, and made various recommendations, some of which
showed that the original purpose of the line had become obscured. M
By 1891 there were 79 miles of metre-gauge track from Kayes to [491]
Mahina, a ferry across the Bafing, 24 miles of 60 cm.-gauge track from
there to Diouléba, and 3 miles of 50 cm.-gauge track beyond that place.
In the same year another Commission was appointed, and in the
following year a party of engineers was sent out under the command
of Major Joffre. Substantial improvements were rapidly effected, M
and in 1893 the first train ran from Kayes to Mahina. In 1896 the [491]
Bafing was bridged. In May 1904 the line, metre-gauge all the way,
reached the Niger at Bamako and on 10 December that year it reached S
Koulikoro. It has since been considerably improved. M

In the summer of 1902 the Senegal failed to rise. This prevented 499
any effective provisioning of the posts in French Sudan and also gave 175
a stimulus to railway construction. The original plan for a line from
St. Louis to Kayes was dropped, and Thiès was chosen as the junction.
The new railway was intended not only to provide a link between
existing lines but also to find and attract local traffic. Various routes
were discussed, and in 1907 construction began from both ends. The
section from Kayes to Ambidedi (26 miles) was opened in December
1908 and that from Thiès to Diourbel (50½ miles) on 16 July 1909.
Work on the latter began again in February 1910 and the line reached
Guinguiné in the December of that year. By the middle of 1913 it

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123. *Railway bridge across the Falémé at Kidira*

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124. *Diourbel: the railway station*

[facing p 464]

22:Winterbotham et al. K-4 (no date) 1944 MS37 Senegal MS 37
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499 175 was at Koussanar, and when war came in 1914 it had reached a place called Cotiari Naoudé, 258 miles from Thiès. In 1920 a force of 8,000 labourers was recruited, and the line was completed on 5 August 1923.

S 499 175 [933] *Branch Lines.* Work on the branch from Guinguiné to Kaolack began on 6 June 1911, and the line was officially opened on 1 January 1912. This railway, of course, has transformed Kaolack and has been the prime factor in its growth to its present importance. The private line from Kaolack to Lyndiane was built by the firm of Charles Peyrissac et Cie in 1925.

The line from Diourbel was originally planned to go to Tal-Tal and Thiel. Construction began on 1 December 1929, and the line reached Touba on 1 March 1931. Financial difficulties postponed further extension, and nothing more has been done up to the present. This branch has proved valuable to local producers of ground-nuts and has been more successful than its contemporary to Linguéré.

This latter was begun from Louga early in 1929 and reached Coki (18¼ miles) on 1 October that year. Railhead was at Dahra on 1 October 1930 and the whole line was finished on 1 October 1931. Results have not been quite as good as had been hoped.

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Permanent Way, Locomotives, and Rolling-stock

Rails and Sleepers. The section from Dakar to St. Louis has rails weighing 30 kg. per metre (61 lb. per yard) bought second-hand from the Nord Railway of France in 1929, and that from Thiès to Kayes has rails weighing 25 kg. and 26 kg. per metre (50½ lb. and 52½ lb. per yard). The track from Kayes to Koulikoro was originally laid with rails weighing 20 kg. per metre (40 lb. per yard) and was notorious for its numerous rail breakages; but it is now in process of being relaid on a new alinement with rails weighing 30 kg. per metre (61 lb. per yard). The Louga–Linguéré branch was given the old rails from the Dakar–St. Louis line. These weigh 20 kg. per metre (40 lb. per yard).

S Sleepers are of steel.

496 *Gradients and Curvature.* These vary considerably, but there are no gradients steeper than 1 : 30, and the minimum radius of curves is 197 yards. It is intended ultimately to reduce these figures to 1 : 71 and 219 yards respectively.

Bridges. The principal bridges are noted in the itineraries below. Minor bridges are of steel and concrete, and in many cases old rails are used as reinforcing bars. Culverts are numerous.

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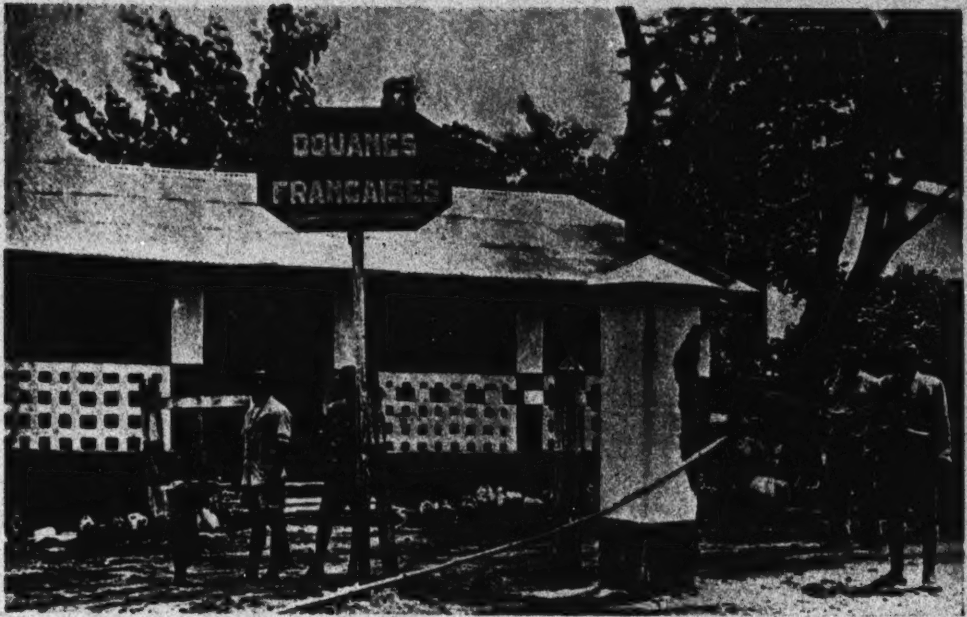
22:Winterbotham et al. K-4 (no date) 1944 MSST Senegal
Togo FA 40
Ghana FE 1

[facing p. 165]


DOUANES
FRANCAISES

125. *Custom-house at the frontier between French Togo and British Togo*

22:Winterbotham et al. K-4 (no date) 1944 MS37 Senegal MS37

Locomotives. In 1939 the following locomotives were in service: 493

Makers and type	*Adhesive weight in tons*	*Number*
Mallet articulated	43–50	10
Mikado 2-8-0	30–40	42
Pignet	29	34
Cail	27	24
Cail, Corpet, Weidknecht, Decauville	13–27	75
	Total	185

Since that date 2 Micheline railcars, 3 Als-Thorn diesel electric locomotives, and 2 Beyer-Garratts have been brought into use. The Beyer-Garratts are 4-4-2+2-4-4 articulated with an adhesive weight of 91 tons.

Fuel. Neither coal nor wood is found locally. Before 1940 some 372 60,000 tons of briquettes were annually imported. At the present time these are hard to obtain, and they are supplemented by whatever wood is available and by briquetted ground-nut shells.

Carriages and Wagons. In 1939 there were 254 passenger coaches 493 and 2,105 goods wagons in service. The passenger coaches included restaurant cars and sleeping cars. At the end of 1939, 177 covered goods wagons were delivered from France.

State of Repair. There are excellent workshops at Thiès; but the 497 general standard of upkeep, never very high, has greatly deteriorated 498 as a result of stocks of material becoming almost exhausted.

Traffic

The following table gives figures for 1937 and 1938: 497

	1937	*1938*
Passengers	2,603,341	2,660,497
Passenger miles	118,433,207	120,620,300
Freight in tons	615,043	501,593
Ton miles	120,570,598	107,970,715
Revenue	£876,411	£684,788

The principal items of freight handled were ground-nuts, shea [938] butter, gum arabic, sisal, and fuel.

22:Winterbottham et al. K-4 (no date) 1944 MS37 Senegal MS 37

Itineraries

Route 1

DAKAR–ST. LOUIS

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Distance from Dakar Km.	Distance from Dakar Miles	Elevation in feet	Stations	Itinerary
0	0	..	DAKAR	The main passenger station is by the Bassin Ouest. Immediately north-west are workshops and a goods station. Numerous tracks run along the sides of the basins, and, ¾ mile from the station, there is a branch that connects to the quarries, 3 miles to the west.
4	2½	..	..	At 2½ miles a track turns south-east to the goods station by the oil-fuel depot. At first the main line runs north, but it gradually bends east in conformity with the shape of Hann bey. It is close to the sea across the marigot of Hann, but turns a little inland to
13	8	33	TIAROYE	reach Tiaroye station. This is 1½ miles from its village. The line continues inland, avoiding plantations of palm trees,
20	12½	..	M'BAÔ (halt)	and follows a somewhat
27	17	33	RUFISQUE	winding course to Rufisque. The station is on the north side of the town, about ½ mile from the sea. The line keeps parallel to the shore as far as the village of
32	20	..	..	Bargny-Gouddou. Here
46	28½	82	SEBIKOTANE	it swings north-east through wooded un-
55	34	66	POUT	dulating country to the brushwood Forest of Thiès. This is on the top and face of a scarp, and the railway makes use of a narrow valley to reach

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22:Winterbotham et al. K-4 (no date) 1944 MS37 Senegal MS 37

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[498]

Distance from Dakar Km.	Distance from Dakar Miles	Elevation in feet	Stations	Itinerary
				the important junction of
70	43½	207	Thiès	Thiès, the highest station of this part of the railway. There are sidings and workshops. The line to Koulikoro continues to the east, but that to St. Louis turns north-east, running parallel
92	57	164	Tivaouane	lel with and about 20
104	64½	131	Piré-Goureye	miles from the coast. It
120	74½	132	Mékhé	traverses a sandy and in-
130	81	125	Kellé	hospitable region, which
142	88	130	N'Dandé	is, nevertheless, impor-
155	96	133	Kébémer	tant for ground-nuts. The line runs in long straight stretches and is
171	106	131	Goumbo Guéoul	never far from the road.
192	119	128	Louga	At Louga there is a junction with the branch that goes south-east to Linguéré. The main line adopts a more winding
217	135	66	Sakal	course across a thinly vegetated area, descend-
230	143	33	M'Pal	ing gently. At M'Pal it turns west over sandy
244	151½	16	Rao	country to reach the coastal marshlands at
257	159½	..	Leybar (halt)	Leybar. The Leybar marsh itself is crossed by
258	160	..	..	a bridge of 4 spans, respectively of 89 feet, 108 feet, 89 feet, and 108 feet. The line terminates
262	163	7	St. Louis	at Sor (Fig. 53), where there are three stations: goods, main, and harbour. The last named is on a branch track, which runs on to the principal jetty. There is no railway bridge across the Senegal.

[498]

22:Winterbotham et al. K-4 (no date) 1944 MS37 Senegal MS37

Route 2

LOUGA-LINGUÉRÉ

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Distance from Louga Km.	Miles	*Elevation in feet*	*Stations*	*Itinerary*
0	0	138	Louga	The line branches south-east away from the main line from Dakar to St. Louis. It then turns east to maintain a generally eastwards direction. The country varies little in height and is devoid of features of interest. The line is rarely more than a hundred yards from the road. In its last stages it makes use of a ouadi commonly called the Ferlo Valley.
22	13	151	Ouarrac	
30	18⅝	157	Coki	
43	27	164	Tiamen	
57	35⅜	190	N'Diao	
68	42	180	Boutiérobé	
84	52	131	Niandoul	
92	57	98	Dahra	
104	65	138	Somme	
116	72	118	Ouarkhor	
131	81	33	Linguéré	Linguéré itself is a road junction of considerable local importance.

[491]

Route 3

THIÈS-KIDIRA

Distance from Dakar Km.	Miles	*Elevation in feet*	*Stations*	*Itinerary*
70	43½	207	Thiès	Leaving the route for St. Louis, this line bears south-east and then east to descend to Kombole, passing through densely populated areas. From Kombole it runs almost due east-south-east all the way to Diourbel. It crosses a number of minor valleys. At Diourbel is the junction with the branch to Touba. The main line turns sharply south-east through country covered with brushwood and clumps of trees.
85	53	112	Thienaba (halt)	
96	60	36	Kombole	
110	68	52	Dangalma (halt)	
124	77	66	Bambey	
139	86	72	Diabaye Lagnar (halt)	
151	94	39	Diourbel	
165	102½	81	Toki (halt)	
178	110⅝	82	Gossas	
197	122	66	Ganiek (halt)	

22: Winterbotham et al. K-4 (no date) 1944 MS37 Senegal MS 37

496
133

Distance from Dakar Km.	Distance from Dakar Miles	Elevation in feet	Stations	Itinerary
206	128	65	Guinguiné	The branch line from Kaolack leaves Guinguiné in the same direction as the main line approaches it. The latter curves gently to assume an easterly course. The Saloum, now shrunk to a tiny seasonal stream, is crossed by a culvert shortly after Birkelane. As far as Malème, 4 miles beyond Malème-Hodar station, the line is accompanied by the road, but subsequently runs to its north. The railway comes somewhat south of its most direct route, partly to skirt the arid Ferlo region and partly to divert trade from the Gambia. Most of the villages in this section are the result of the railway. After Sinthiou-Malème the line makes use of the upper part of the valley of the Sandougou, and so reaches Tambacounda, the route's southernmost point in Senegal.
231	143½	33	Birkelane	
233	145	..	..	
252	156⅝	39	Kaffrine	
280	174	131.	Malème-Hodar	
310	193	148	Maka Yop	
333·5	207	98	Koungheul	
361	224	79	Koupentoun	
389	242	130	Malème-Niani	
413	257	66	Koussanar	
433	269	39	Sinthiou-Malème	
459	285	148	Tambacounda	
486	302	72	Cotiari Naoudé	Bearing north-eastwards, the line runs across a marshy but fertile plain, and, beyond Bala, across undulating country. Between Couténabé and Sinthiou Fissa it rises to its highest point, the watershed between the Gambia and the Senegal basins. As far as Couténabé the line keeps in close company with the road, but from this point onwards the two are apart, the road running to Nayes and the railway
521	324	164	Bala	
550	342	223	Bouigheul Bamba	
573	356	180	Goudiri	
592	368	230	Couténabé	
607	377	331	..	
620	385	213	Sinthiou Fissa	

[491]

[361]

22:Winterbotham et al. K-4 (no date) 1944 MS37 Senegal MS37.

496
133

Distance from Dakar Km.	*Miles*	*Elevation in feet*	*Stations*	*Itinerary*
638	396	98	Kidira	to Kidira. The latter is on the Falémé, which is the border of French Sudan, and it is 59½ miles from Kayes and 405 miles from Koulikoro.

Route 4

DIOURBEL–TOUBA

Distance from Diourbel Km.	*Miles*	*Elevation in feet*	*Stations*	*Itinerary*
0	0	39	Diourbel	Leaving the main line a little over a mile from Diourbel station, this branch line bears north-east. It maintains this general direction throughout its course, having only gentle curves and gradients. The country on either side of the line is extensively cultivated for ground-nuts.
16·5	10	34	Doulo	
29	18	102	Dala	
39	24	161	Mbaké	
50	31	167	Touba	

Route 5

GUINGUINÉ–KAOLACK

Distance from Guinguiné Km.	*Miles*	*Elevation in feet*	*Stations*	*Itinerary*
0	0	65	Guinguiné	Coming out of Guinguiné by the north-west, the line curves very abruptly to run south-west. It is alongside the road all the way. At Kaolack the main station is almost on the bank of the Saloum, but just before it there is a junction with the line to Lyndiane.
22	14	12	Kaolack	

Route 6

KAOLACK–LYNDIANE

496
133

Distance from Kaolack *Km.*	*Miles*	*Elevation in feet*	*Stations*	*Itinerary*
0	0	..	KAOLACK	After leaving the main line, this railway runs through its own station. It turns north-west and then west-north-west to follow the road. Five miles from the town it curves south-west to reach the landing-stage at Lyndiane.
10·5	6½	..	LYNDIANE	

ROADS

There are 984 miles (1,584 km.) of intercolonial roads, 66 miles (106 km.) of an Imperial road, and some 2,000 miles (3,300 km.) of colonial roads. The impression that these figures give, however, needs two qualifications. Firstly, there are considerable areas of the colony without roads, and, secondly, many of the roads are by no means up to the standard of their class. 491

Intercolonial

Intercolonial roads exist as follows: Dakar–St. Louis, Thiès–Nayes, Tambacounda–border of French Guinea, and Kaolack–frontier of the Gambia.

Itineraries. The road from Dakar to St. Louis follows much the same route as the railway. It goes along the coast to Rufisque (15 miles) and then turns inland to Thiès (44 miles). Running roughly parallel to the Atlantic coast, it goes through Tivaouane (57 miles) and Louga (121 miles) to M'Pal (144 miles). It then turns towards the sea to reach St. Louis (168 miles). This road is one of the best in the Federation. Between Dakar and Thiès the surface is tarmac and between Thiès and St. Louis it is firm laterite. A lorry takes about 11 hours to cover the whole distance.

The second road also follows the railway, except between Gossas and Kaffrine. Leaving Thiès by the east, it makes a huge curve through Diourbel (64 miles) and Gossas (80 miles) to Kaolack (107 miles). After that it follows a generally easterly direction by way of Kaffrine (144 miles) and Koungheul (204 miles) to Tambacounda (295 miles), an important road junction. From there it turns east-north-east to Bala (338 miles) and Nayes (416 miles). The latter is on the Falémé, which forms the boundary with French Sudan, and 55 miles from Kayes. This road is part of the great highway that connects Dakar with Zinder, but its surface varies from indifferent to bad. The section east of Thiès, for example, is sandy with deep ruts; from Kaolack to Kaffrine sand makes the going heavy and slow; and from Tambacounda to Nayes there are numerous marshes. Many stretches east of Kaolack are impracticable in the wet season.

The third road strikes south from Tambacounda, crosses the Gambia river at Diabougou (25 miles), and reaches the border of French Guinea at 108 miles, 180 miles from Labé. The Gambia is crossed by a temporary bridge, which has been built to replace the ferry that was sunk in April 1941. The surface of this road is fair, being metalled with large pieces of laterite.

The road south-west from Kaolack goes to Messira (49 miles), and then turns south to cross the frontier of the Gambia at 57 miles. From this point a road leads to Barra, 10 miles away, from where there is a ferry to Bathurst.

Imperial

The Imperial road leaves St. Louis by its suburb of Sor and goes north-east through Ross (34 miles). The Senegal river, the boundary of Mauritania, is crossed again at Rosso (66 miles), 38 miles south-west of Mederdra. There is a moderately good laterite surface across
[133] level sandy country.

Colonial

There is a long road that provides a connexion along the left bank of the Senegal from near St. Louis to Nayes. Fifty-eight miles from the former town it leaves the Imperial road. From that point it goes to Richard Toll (13 miles), Dagana (28 miles), and Podor (77 miles). After that it does not go through any large town for many miles; but at 127 miles there is a turn for Boghé (Mauritania), 4 miles distant, at 182 miles a turn for Diorbivol, 5 miles distant, and at 186 miles a turn for Kaédi (Mauritania), 16 miles distant. The road then proceeds to Matam (235 miles), an important route centre, and Bakel (328 miles), crosses the railway at Kidira (360 miles), and joins the intercolonial road at Nayes (365 miles). Almost the whole length of this road is liable to flooding.

491

Two other roads start from Matam. One goes south-westwards to Nelbi (56 miles) and then follows the Ferlo valley westwards to Yoroforé (98 miles), Kagnar (130 miles), and Linguéré (158 miles). It then continues westwards to Ouarkhor (166 miles), Dahra (183 miles), Coki (224 miles), and Louga (242 miles). Although ranked as a colonial road, this is in reality a desert track, much of it being across rough and waterless country. The other road from Matam is little better. It goes southwards through Malandou (31 miles) and Toubel Bali (88 miles) to Tambacounda (155 miles).

Another road that is very poor for its class begins at Dagana and goes southward across the semi-desert to Yang-Yang (68 miles), crosses the Matam-Louga road at Dahra (89 miles), and then goes through Sagata (98 miles) to the railway terminus at Touba (130 miles). From there the road has a rather better surface to Mbaké (138 miles) and Diourbel (162 miles).

The south-east of the colony is served by a road that runs from Tambacounda to Nieriko (42 miles) on the Gambia and then by way of Dialakoto (48 miles) and Badon (128 miles) to Kédougou (160 miles). From Badon a branch runs south-east for 86 miles to Satadougou, which is just over the border of French Sudan.

In the Casamance Territory there is a road from Ziguinchor through Bignona (16 miles), Sedhiou (74 miles), Kolda (136 miles), and Velingara (205 miles) to meet the intercolonial road at Diabougou (245 miles). A branch runs from Velingara to Médina Pakan (32 miles). Another road traverses districts on the left bank of the Casamance from Ziguinchor to Yatakounda (48 miles) and Kolda (130 miles). From Bignona a road runs north-west to Diouloulou (35 miles), crosses the frontier of the Gambia at 46 miles, and provides a connexion with Bathurst, 47 miles farther to the north. This last road is of fairly modern construction and has a tolerable surface, but the others are poor.

494

Bus Services

Table VI shows the bus services in 1939.

TABLE VI. *Bus Services*

Route	*Service*
Bambey–Fatik–Foundiougne–Kaolack	Bambey–Foundiougne: daily; Foundiougne–Kaolack: daily 15 November to 30 April, fortnightly 1 May to 14 November. Service in conjunction with the railway.

494

Route	*Service*
Thiès–M'Bour–Joal	Thiès–M'Bour: twice each weekday; M'Bour–Joal: 4 days a week 1 November to 30 June only.
St. Louis–Dagana–Matam–Kidira	Twice a week 1 December to 30 June. Journey time: 50 hours.
Ziguinchor–Sedhiou–Kolda	Dry season: daily. Wet season: as practicable and as required. Journey time: 7½ hours. Occasional extensions to Tambacounda.

SIGNALS

Cables

206 Dakar is connected by cable to Conakry, Fernando Noronha (Brazil), Casablanca, and Brest. In 1939 to send a message to France cost 11·70 francs (1*s.* 4*d.*) a word.

Telegraphs and Telephones

Telegraph lines run alongside the railways and the following roads:

St. Louis–Dagana–Matam–Bakel–Kidira.
Thiès–M'Bour–Joal–Fatik–Bambey.
Tambacounda–Diabougou–Médina Pakan–border of French Guinea.
Diabougou–Kolda–Sedhiou–Bignona–Ziguinchor.
Bignona–Bathurst (the Gambia).

There are also connexions across the Senegal into Mauritania. The colony has more miles of telephone line than all the others combined. Lines are laid alongside the following roads: Dakar–Thiès–St. Louis; Thiès–Diourbel–Kaolack; Rufisque–M'Bour–Joal–Fatik–Kaolack; and Ziguinchor–Bignona–Sedhiou–Kolda. The standard of efficiency is low.

Wireless

209 There are stations at Dakar, Kaolack, Rosso, St. Louis, Tambacounda, and Ziguinchor, of which Dakar is the only one to do any broadcasting. Details are given in Table VII. In 1939 radio-telegrams to France cost 9·75 francs (1*s.* 1*d.*) a word. [206]

22:Winterbotham et al. K-4 (no date) 1944 MS37 Senegal MS 37

206
207
507

TABLE VII. *Wireless Stations*

Station	*Approx. position*	*Wave-length: long, medium, or short*	*Power in kilowatts*	*Owner and remarks*
Dakar	14° 42′ N. 17° 25′ W.	9 short	Unknown	Naval station. Services with Casablanca, Fort de France, and Toulon; also with flying-boats.
Dakar	14° 40′ N. 17° 27′ W.	3 medium 22 short	20·0 5·0 1·0 0·5 0·2 and unknown	Coast, commercial, and broadcasting stations with service to France, French colonies, and the interior. Broadcasting at 0·35 kW. midday and in the evening, except for one station at 0·2 kW. Meteorological bulletins.
Dakar Aéradio and Aérogonio	14° 42′ N. 17° 28′ W.	4 medium 5 short	2·0 0·6	Aeronautical and direction-finding station.
Kaolack	14° 07′ N. 16° 07′ W.	3 short	0·1	Commercial station. Interior service.
Kaolack Aéradio	14° 07′ N. 16° 07′ W.	2 medium 4 short	0·1	Aeronautical station.
Ross	16° 14′ N. 15° 49′ W.	2 short	0·01 0·01	Commercial station. Interior service.
St. Louis	16° 00′ N. 16° 31′ W.	5 short	0·25 0·05 0·02 and unknown	Commercial and military station. Interior service.
St. Louis Aéradio	16° 00′ N. 16° 31′ W.	2 medium 5 short	1·0 0·5 and unknown	Aeronautical and direction-finding station.
Tambacounda	13° 46′ N. 13° 41′ W.	3 short	0·2 0·08	Commercial station. Interior service.
Tambacounda Aéradio	13° 46′ N. 13° 41′ W.	2 medium 4 short	0·1	Aeronautical station.
Ziguinchor	12° 32′ N. 16° 21′ W.	3 short	0·02	Commercial station. Interior service.
Ziguinchor Aéradio	12° 32′ N. 16° 21′ W.	1 medium 3 short	0·1	Aeronautical station.

22 Winterbotham et al. K-4 (no date) 1944 MS37 Senegal
Mali MS37 MS35

S
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439

APPENDIX A

Senegal and French Sudan: Principal Imports and Exports

	Unit	1935		1936		1937	
		Quantity	*Value in francs*	*Quantity*	*Value in francs*	*Quantity*	*Value in francs*
Exports							
Ground-nuts in shell	tons	345,875	313,432,794	393,485	331,674,005	517,322	431,748,036
Shelled ground-nuts	,,	28,166	34,333,683	60,448	73,384,546	117,025	126,720,675
Ground-nut oil	,,	351	861,751	2,646	2,800,397	3,220	16,940,707
Shea butter and oil	,,	2,381	3,626,922	1,466	2,228,042	3,019	5,585,371
Oilcake	,,	3,793	1,312,226	7,030	2,047,107	13,015	6,004,838
Gold	lb. Troy	2,095	8,901,740	1,252	2,803,527	2,704	31,283,985
Gum arabic	tons	4,728	7,136,281	4,891	7,450,860	6,246	15,047,090
Sisal	,,	3,324	4,704,078	2,839	3,287,966	3,061	4,665,701
Kapok	,,	781	3,133,040	589	2,372,178	623	2,458,800
Imports							
Guinées and similar cloths	1,000 m.[1]	9,445	17,259,597	11,698	22,384,097	9,662	38,197,354
Cotton cloths other than guinées	tons	4,635	80,564,648	5,841	124,034,528	6,825	250,516,890
Ready-made clothing	,,	212	4,164,653	244	7,089,014	483	21,623,704
Boots and shoes[2]	pairs	78,801	7,364,340	266,787	7,000,120	388,415	10,385,313
Sailcloth, tarpaulin, and sackcloth	tons	2,187	7,088,696	3,067	10,211,697	5,496	27,422,905
Motor vehicles	Nos.	690	8,690,069	856	13,213,870	1,019	19,485,856
Iron goods[3]	tons	4,720	4,468,910	7,871	7,378,240	11,279	16,906,941
Metal goods	..	..	23,529,206	..	36,210,388	..	69,810,487
Machines and machinery	..	..	13,984,073	..	12,827,038	..	23,267,430
Rice	tons	67,076	37,381,225	88,811	49,055,535	113,875	110,839,033
Wine	gallons	1,201,373	16,457,225	1,405,096	16,084,960	1,522,944	21,185,905
Sugar	tons	13,354	16,960,069	16,721	19,877,037	19,594	31,472,641
Wheat flour	,,	13,018	9,931,300	12,281	9,905,140	14,873	21,403,576
Tea	,,	395	4,290,680	696	7,338,370	824	6,777,110
Oil fuel	,,	390,041	53,226,690	474,190	50,813,294	670,744	133,170,086
Coal	,,	105,868	13,096,162	246,690	32,387,343	371,085	47,330,724
Soap	,,	1,419	3,146,580	1,639	3,800,480	2,067	6,811,761

[1] 1,094 yards.

[2] Mainly *babouches* (Moorish heel-less slippers).

[3] Including rails for railway lines.

[pp 477 - 596 not processed]

Senegal MS37

175, 648, 726

[For a discussion of the French relations with the damels of Cayor, a Wolof state, between 1859 and 1864 when this kingdom became part of the colony of Senegal (especially the military operations) see 34:Faidherbe, MS30 Wolof, category 116.]